

DOCKET FILE COPY ORIGINAL

Before the
Federal Communications Commission
Washington, D.C. 20554

SEP 8 1 11 PM '04

In the Matter of

DISPOSITION

Second Periodic Review of the
Commission's Rules and Policies
Affecting the Conversion
To Digital Television

MB Docket No. 03-15

RM 9832

REPORT AND ORDER

Adopted: August 4, 2004

Released: September 7, 2004

By the Commission: Chairman Powell and Commissioners Copps, Martin, and Adelstein issuing separate
statements.

TABLE OF CONTENTS

Heading	Paragraph #
I. INTRODUCTION	1
II. BACKGROUND	7
III. PROGRESS REPORT	11
A. Build-Out Status	12
B. DTV Equipment Availability	16
C. Ongoing Commission Efforts to Encourage the DTV Transition	19
IV. ISSUE ANALYSIS	22
A. Channel Election	22
1. Channel Election and Repacking Process / New Allotment Process	33
2. Freeze of Procedures to Change Allotments	68
3. Border Interference Issues	70
B. Replication and Maximization	72
1. Single Channel Broadcasters	88
2. Early Surrender of DTV Out-of-core Channels ("Flash Cut")	89
C. Satellite Stations	98
D. Disposal of Construction Permits and Applications for Replication/Maximization	107
E. Pending DTV Construction Permit Applications	110
F. Intermediate Signal Level	114
G. Interference Protection of Analog and Digital Television Service in TV Channels 51-69	116
1. Definition of "Actual" Parameters	116
2. Applications for New Analog TV or DTV Facilities	118
3. Channel 51	122
H. Simulcasting	125

I. Noncommercial Educational Television Stations	138
J. DTV Transmission Standard and PSIP	142
1. Update of the DTV Transmission Standard	142
2. PSIP	149
3. PSIP and DTV V-Chip	154
4. PSIP and LPTV/TV Translators	160
K. DTV Closed Captioning.....	161
L. DTV Labeling Requirements and Consumer Awareness	166
M. DTV Station Identification.....	169
N. Distributed Transmission Technologies.....	174
V. PROCEDURAL MATTERS	179
VI. ORDERING CLAUSES	183

Appendix A: List of Commenters and Reply Commenters

Appendix B: Final Rules

Appendix C: Final Regulatory Flexibility Analysis

Appendix D: DTV Construction Progress

Appendix E: Pre-Election Certification Form

Appendix F: Digital Channel Election Forms

I. INTRODUCTION

1. With this Report and Order in our second periodic review, we resolve several issues important to the rapid conversion of the nation's broadcast television system from analog to digital television ("DTV"). The Commission conducts these periodic reviews of the progress of the digital conversion to make any adjustments necessary to our rules and policies to "ensure that the introduction of digital television and the recovery of spectrum at the end of the transition fully serves the public interest."¹ In our first DTV periodic review, begun in March 2000, we addressed a number of issues important to the transition.² In the *Notice of Proposed Rulemaking* in this second periodic review, we revisited several issues addressed in the first periodic review and sought comment on additional issues that we consider necessary to resolve in order to ensure continued progress on the digital transition.³ We

¹ *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, 12 FCC Rcd 12809, 12856 (1997) ("Fifth Report and Order"), on recon., 13 FCC Rcd 6860 ("Service Reconsideration Order"), on further recon., 14 FCC Rcd 1348 (1998) ("Second MO&O on Recon. of the Fifth and Sixth R&Os" or "DTV Second MO&O"), recon. dismissed, Order, 14 FCC Rcd 11572 (1999), recon. dismissed, Order, 15 FCC Rcd 4760 (2000).

² *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, 16 FCC Rcd 5946 (2001) ("First DTV Periodic Report and Order"), on recon., 16 FCC Rcd 20594 (2001) ("First DTV Periodic MO&O"), *Second Report and Order and Second Memorandum Opinion and Order*, 17 FCC Rcd 15978 (2002) ("DTV Tuner Order") (addressing DTV receiver standards and labeling requirements), *Third Memorandum Opinion and Order on Reconsideration*, 17 FCC Rcd 18571 (2002) (denying a Petition for Reconsideration of the determination in the MO&O that DTV area expansion applications must protect certain earlier-filed NTSC applications).

³ *Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, 18 FCC Rcd 1279 (2003) ("NPRM" or "Second DTV Periodic NPRM").

received numerous comments in response to our *NPRM*.⁴

2. In this Report and Order, we adopt a multi-step channel election and repacking process through which broadcast licensees and permittees ("licensees") will select their ultimate DTV channel inside the core (i.e., channels 2-51). The process will start in November 2004 with licensees filing certain pre-election certifications. In December 2004, licensees currently with an in-core channel (whether one or two) will make their channel elections in the first round of elections. Licensees currently with only out-of-core channels (i.e., channels 52-69), as well as licensees electing to be treated like them, will file elections in the second round, expected in July 2005. Licensees without confirmed elections from the previous two rounds will file elections in the third round, expected in January 2006. In a Public Notice released August 3, 2004, the Media Bureau implemented a freeze on the filing of certain TV and DTV requests for allotment or service area changes to facilitate the channel election and repacking process.⁵ The freeze is described in section IV. A., *infra*.

3. We adopt the following replication and maximization protection deadlines:

- **July 1, 2005** – Use-it-or-lose-it deadline for DTV licensees affiliated with the top-four networks (i.e., ABC, CBS, Fox and NBC) in markets 1-100. Those licensees that receive a tentative DTV channel designation in the channel election process on their current digital channel must construct full, authorized facilities. Those licensees that receive a tentative DTV channel designation on a channel that is not their current DTV channel must serve at least 100 percent of the number of viewers served by the 1997 facility on which their replication coverage was based.
- **July 1, 2006** – Use-it-or-lose-it deadline for all other commercial DTV licensees as well as noncommercial DTV licensees. Those licensees that receive a tentative DTV channel designation in the channel election process on their current digital channel must construct full, authorized DTV facilities. Those licensees that receive a tentative DTV channel designation on a channel that is not their current DTV channel must serve at least 80 percent of the number of viewers served by the 1997 facility on which their replication coverage was based.

4. In evaluating service areas we will consider the population served within the geographic area reached by a station's service area as defined under Section 73.622(d) less any portions of that area that receive interference from other stations. Stations failing to meet the replication/maximization requirements on their allotted DTV channels by our deadlines will lose interference protection to the unserved portions of their current DTV service areas, as well as to the equivalent unserved portion of their NTSC Grade B contours for stations using those channels for DTV service after the transition occurs. Those stations wishing to maximize their service area must meet the above requirements in order to "carry over" their maximized service area to their in-core assignment with a priority over Class A stations.⁶ We adopt limited exceptions for certain stations with out-of-core DTV allotments and satellite stations, both of which may turn in their DTV allotments and "flash cut" to digital by the end of the transition without losing their replication/maximization rights. We do not adopt an intermediate signal

⁴ A list of commenters is attached at Appendix A.

⁵ The freeze includes applications to swap channels, but will not apply to proposals for negotiated channel election arrangements submitted as part of the channel election process, set forth in section IV.A., *infra*.

⁶ *Establishment of a Class A Television Service*, 15 FCC Rcd 6355, 6379, ¶ 58 (2000) ("*Class A Order*"), on recon., 16 FCC Rcd 8244, 8269, ¶ 67 (2001) ("*Class A Recon*").

requirement, but retain the 7 dB increase in the principal community signal coverage required by December 31, 2004, for commercial stations and December 31, 2005, for noncommercial stations.

5. In this Report and Order, we also eliminate, for the time being, the requirement that broadcasters air on their digital channel the programming aired on their analog channel ("simulcasting"). We retain, however, the minimum digital operating hours requirement currently tied to the simulcast rule. We permit satellite stations to surrender their paired DTV channels and flash cut to DTV by the end of the transition. We are also reviewing the issues raised in the comments concerning the need for point-of-sale labeling for digital and analog televisions. We are monitoring retailer and manufacturer efforts to improve information provided to consumers and will address this issue in a future item. We adopt Program and System Information Protocol ("PSIP") and mandate its use by broadcasters.⁷ We also adopt new rules and clarify existing rules to support the functioning of closed captioning and v-chip on digital televisions. We approve in principle the use of distributed transmission system ("DTS") technologies and defer to a separate "fast track" proceeding the development of rules for DTS operation and the examination of several policy issues related to its use.

6. Finally, we sought comment in the *NPRM* on how we should interpret certain portions of Section 309(j)(14) of the Communications Act, which requires the Commission to reclaim the 6 MHz each broadcaster uses for transmission of analog television service by December 31, 2006, unless an extension is granted pursuant to the criteria established in Section 309(j)(14)(B). Commenters made a number of suggestions regarding the interpretation of various aspects of Section 309(j)(14)(B). We are continuing to review these comments and to consider the issues raised in the *NPRM* regarding Section 309(j)(14) and plan to address these issues in the near future.

II. BACKGROUND

7. In January 2001, we released the *First DTV Periodic Report and Order* in which we made a number of determinations to further the transition. Among other things, we established channel election and interference protection deadlines. We also imposed a principal community coverage requirement that is stronger than the DTV service contour requirement adopted as an initial obligation in the *Fifth Report and Order*. This new principal community coverage requirement, which becomes effective December 31, 2004, for commercial stations and December 31, 2005, for noncommercial stations, was intended to improve the availability of service in the community of license and to prevent undue migration of stations from their communities of license.

8. In the *First DTV Periodic MO&O*, we revised a number of the determinations made in the *First DTV Periodic Report and Order*. To address broadcasters' concerns that they could not meet certain requirements in the *First DTV Periodic Report and Order*, we decided to allow stations to construct initial DTV facilities designed to serve at least their communities of license, while still retaining for the time being DTV interference protection to provide full replication at a later date.⁸ We

⁷ See "Program and System Information Protocol for Broadcast and Cable," Advanced Television Systems Committee, Doc. A/65B, Rev. B to PSIP for Terrestrial Broadcast and Cable ("ATSC A/65B" or "PSIP") (Mar. 18, 2003).

⁸ We did not, however, alter our decision to require stations to increase their signal strengths within their communities of license beyond those adopted as an initial requirement in the *Fifth Report and Order*. This principal community coverage requirement will become effective December 31, 2004, for commercial stations and December 31, 2005, for noncommercial stations.

also determined that we would continue to provide DTV interference protection to the maximized service area specified in outstanding DTV construction permits for facilities in excess of those specified in the DTV Table of Allotments.⁹ We temporarily deferred the replication protection and channel election deadlines established in the *First DTV Periodic Report and Order*. We stated, however, that in the second DTV periodic review we would establish a firm date by which broadcasters must either replicate their NTSC coverage or lose DTV service protection of the unreplicated areas, and by which broadcasters with authorizations for maximized digital facilities must either provide service to the coverage area specified in their maximization authorizations or lose DTV service protection to the uncovered portions of those areas. We also stated that we would establish a deadline by which broadcasters with two in-core allotments must elect which channel they prefer to use at the end of the transition. We stated that these replication, maximization, and channel election deadlines may be earlier than, but will in no event be later than, the latest of either the end of 2006 or the date by which 85 percent of the television households in a licensee's market are capable of receiving the signals of digital broadcast stations.

9. The reduced build-out requirements adopted in the *First DTV Periodic MO&O* allowed broadcasters to save both on construction and operating costs. In addition, we allowed DTV stations subject to the May 1, 2002, or May 1, 2003, construction deadlines to operate initially at a reduced schedule by providing, at a minimum, a digital signal during prime time hours, consistent with their simulcast obligations.¹⁰ For broadcasters unable to complete even the minimum permitted facilities by the applicable deadline, however, we revised our rules to permit applicants to seek an extension of time to construct a digital television station based on financial hardship.¹¹ By permitting stations to elect a more graduated approach to providing DTV service, we allowed stations to focus their energies initially on providing digital service to their core communities, with the expectation that they would increase operating hours and expand their coverage area as the transition progresses.

10. On January 27, 2003, we began this Second Periodic Review of the Commission's Rules and

⁹ Television broadcast licensees may seek to expand or shift (also referred to as "maximize") their DTV allotments by filing applications to increase power or change the site or height of their antenna in such a way that it increases their DTV service area in one or more directions beyond the area resulting from the station's DTV allotment parameters. The term maximization can be confusing in that it does not necessarily entail enlarging the station's service area. Rather, it might more accurately be characterized as alteration of a station's previously allotted contour. Given that the term maximization is commonly used, however, we will continue to use it here.

¹⁰ See 47 C.F.R. § 73.624(b). Commencing April 1, 2003, DTV licensees and permittees were required to simulcast 50 percent of the video programming of the analog channel on the DTV channel. NCE stations were granted a six-month waiver of the simulcasting requirement, but not the minimum hours of operation requirement, as discussed in section IV.H., *infra*. This requirement stepped up to a 75 percent simulcast requirement in April 2004, and was to increase to a 100 percent requirement in April 2005. 47 C.F.R. § 73.624(f). Stations that were subject to the earlier construction deadlines (top four network affiliates in the top 30 markets) remained subject to the previous rule – *i.e.*, they must operate their DTV station at any time that the analog station is operating.

¹¹ To qualify for an extension of time to construct a digital television facility under the financial hardship standard, the applicant must demonstrate that the cost of meeting the minimum build-out requirements exceeds the station's financial resources. The applicant must provide an itemized estimate of the costs of construction and a detailed explanation of why its financial condition precludes such expenditures. *First DTV Periodic Review MO&O*, 16 FCC Rcd at 20611, ¶ 46.

Policies Affecting the Conversion to Digital Television.¹² Among other things, we sought comment on new channel election, replication, and maximization deadlines for broadcast television service. We also sought comment on a number of other issues concerning the protection that must be provided to incumbent analog and digital broadcasters in channels 52-69 (698-806 MHz, also referred to as the "700 MHz band") during the transition. The *Second DTV Periodic NPRM* raised a number of other issues, including: (1) whether the Commission should retain, revise, or remove the requirement that licensees simulcast a certain percentage of their analog channel programming on their DTV channel; (2) whether the Commission needs to take steps to assist noncommercial television stations in the transition; (3) whether labeling requirements for TV-related consumer equipment would assist the transition and protect consumers; (4) whether and how the Commission should license multiple lower-powered transmitters, similar to cellular telephone systems, called distributed transmission systems; (5) whether broadcasters should be required to include Program System and Information Protocol ("PSIP") information within their digital signals to ensure the availability of certain functions; (6) whether the Commission should adopt digital V-chip and closed captioning requirements; and (7) what station identification requirements should apply to digital stations. In the *Second DTV Periodic NPRM*, we also invited commenters to update the records in the *DTV Public Interest Form NPRM* (MM Docket No. 00-168),¹³ *Children's DTV Public Interest NPRM* (MM Docket No. 00-167),¹⁴ and the public interest *NOI* (MM Docket No. 99-360),¹⁵ and directed that such comments be filed in those proceedings. We will address any comments on public interest issues filed in response to the *Second DTV Periodic NPRM* when we finalize the public interest proceedings in the near future.

III. PROGRESS REPORT

11. The transition to digital television is a massive and complex undertaking, affecting virtually every segment of the television industry and every American who watches television. The spectrum that will be recovered at the end of the transition will bring tremendous benefits to consumers and the United States economy. Twenty-four megahertz of spectrum currently used for television broadcast channels 63, 64, 68, and 69 will be returned and used for first responders and other critically important public safety needs. The remaining 84 MHz in the 700 MHz band (currently television broadcast channels 59-62 and 65-66) have been or will be auctioned for use by new wireless services. The Commission has been continuously involved in the migration to digital television by, among other things, adopting a standard for digital broadcasting, creating a DTV Table of Allotments, awarding DTV licenses, establishing operating rules for the new service, and overseeing the physical build-out of digital broadcast stations.

A. Build-Out Status

12. In 1997, the Commission set dates for construction and operation of broadcasters' allotted digital broadcast facilities. Pursuant to the construction schedule set forth in section 73.624(d) of the

¹² *Second DTV Periodic NPRM*, 18 FCC Rcd 1279 (2003).

¹³ *Standardized and Enhanced Disclosure Requirements for Television Broadcast Licensee Public Interest Obligations*, 15 FCC Rcd 19816 (2000) ("*DTV Public Interest Form NPRM*").

¹⁴ *Children's Television Obligations of Digital Television Broadcasters*, 15 FCC Rcd 22946 (2000) ("*Children's DTV Public Interest NPRM*").

¹⁵ *Public Interest Obligations of TV Broadcast Licensees*, 14 FCC Rcd 21633 (1999) ("*Broadcast Public Interest NOI*").

Commission's rules, affiliates of the top four networks in the top ten television markets were required to complete construction of their digital facilities by May 1, 1999; top four network affiliates in markets 11-30 by November 1, 1999; all remaining commercial television stations by May 1, 2002; and all noncommercial television stations by May 1, 2003.¹⁶

13. As of July 28, 2004, 1,658 television stations in all markets (representing approximately 96 percent of all stations) have been granted a DTV construction permit ("CP") or license. A total of 1,423 stations are now broadcasting a digital signal, 634 with licensed facilities or program test authority and 789 operating pursuant to special temporary authority ("STA") or experimental DTV authority.¹⁷

14. In the top 30 television markets, all 119 network-affiliated television stations are on the air in digital, 110 with licensed DTV facilities or program test authority and nine with STAs. In markets 1-10, of the 40 network affiliates due to be on the air by May 1, 1999, all are providing digital service, 38 with licensed DTV facilities and two with STAs.¹⁸ In markets 11-30, all 79 network affiliate stations required to be on the air by November 1, 1999 are providing digital service. Seventy-two have constructed their licensed DTV facilities and seven are on the air with STAs.

15. Approximately 1,230 commercial television stations were due to commence digital broadcasts by May 1, 2002. As of July 28, 2004, 1,018 of these stations (83 percent) are broadcasting a digital signal. In addition, approximately 373 noncommercial educational television stations were required to commence digital operations by May 1, 2003. As of July 28, 2004, 286 (77 percent) of these stations are broadcasting a digital signal.

B. DTV Equipment Availability

16. In the *NPRM*, we asked several questions about the types and availability of DTV equipment on the market.¹⁹ We invited commenters to provide us with up-to-date information about the pace of DTV receiver sales and the price of such units as well as trends in consumer demand for digital equipment.

17. The Consumer Electronics Association ("CEA") reports that manufacturers offer more than 400 models of HDTV monitors and integrated sets, which is three times the number from 2000.²⁰ It reports an 11 percent drop in HDTV monitor prices from March 2002 to March 2003, with a larger drop expected over the duration of 2003.²¹ The consumer electronics industry invested \$15 billion in DTV products from 1998 through 2003. In addition, CEA reports that DTV products represented more than 10

¹⁶ See *Fifth Report and Order*, 12 FCC Rcd at 12840-41, ¶ 76 (1997); 47 C.F.R. § 73.624(d).

¹⁷ Attached as Appendix D is a chart and further information regarding DTV construction progress.

¹⁸ Two stations that were licensed and on the air prior to September 11, 2001, went off the air due to the attack on the World Trade Center. WABC-DT and WNBC-DT are now back and operating at STA facilities, thereby completing the list of stations once on the air that have returned to operations.

¹⁹ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1287, ¶ 22.

²⁰ CEA Comments at 1.

²¹ *Id.*

percent of all television sales in 2002. In the first quarter of 2003, according to CEA, 766,000 DTV product units were sold, which was up 86 percent over the first quarter unit sales of 2002. CEA projected that manufacturers would sell 3.8 million DTV sets and displays in 2003.²²

18. According to the CEA's website, 4.1 million DTV products were sold in 2003 for about \$6.1 billion, a 44 percent increase in dollar sales and a 56 percent increase in unit sales from 2002.²³ More than 640,000 digital television sets were sold in December 2003 alone. CEA predicts that 5.8 million digital sets will be sold in 2004, 8.3 million in 2005, 11.9 million in 2006 and 16.1 million in 2007.²⁴

C. Ongoing Commission Efforts to Encourage the DTV Transition

19. Since the *First DTV Periodic Report and Order*, we have taken a number of important steps to encourage the consumer adoption of digital television. On August 8, 2002, the Commission adopted the *DTV Tuner Order* requiring that all TV receivers manufactured or shipped in the U.S. with screen sizes 13 inches and above be capable of receiving DTV signals over the air no later than July 1, 2007.²⁵ This requirement will be phased in beginning with the largest sets in 2004 to minimize the cost impact on consumers.²⁶ The DTV tuner requirement was designed to facilitate the transition to digital television by promoting the availability of reception equipment, as well as to protect consumers by ensuring that their television sets go on working in the digital world just as they do today.²⁷

20. In addition to the *Order* mandating DTV tuners, in October 2003, the Commission released a *Second Report and Order and Second Further Notice of Proposed Rulemaking* regarding Commercial Availability of Navigation Devices and Compatibility Between Cable Systems and Consumer Electronics Equipment.²⁸ This *Plug and Play Order* was another step forward in the transition to digital television.

²² *Id.* at 2.

²³ See 2004 Sales of Consumer Electronics to Set a New Record, Surpassing \$100 Billion Mark, Says CEA, Press Release (Jan. 5, 2004) <http://www.ce.org/press_room/press_release_detail.asp?id=10384>: 2003 a Banner Year for DTV; Unit Sales Top Four Million, Press Release (Jan. 12, 2004) <http://www.ce.org/press_room/press_release_detail.asp?id=10396>. Website last visited Feb. 02, 2004.

²⁴ *Id.* CEA defines DTV products as integrated sets and monitors displaying active vertical scanning lines of at least 480p and, in the case of integrated sets, receiving and decoding ATSC terrestrial digital transmissions.

²⁵ *DTV Tuner Order*, 17 FCC Rcd at 15996, ¶ 40.

²⁶ Receivers with screen sizes 36 inches and above – 50 percent of a responsible party's units must include DTV tuners effective July 1, 2004; 100 percent of such units must include DTV tuners effective July 1, 2005. Receivers with screen sizes 25 to 35 inches – 50 percent of a responsible party's units must include DTV tuners effective July 1, 2005; 100 percent of such units must include DTV tuners effective July 1, 2006. Receivers with screen sizes 13 to 24 inches – 100 percent of all such units must include DTV tuners effective July 1, 2007. TV Interface Devices, VCRs, and DVD players/recorders, etc. that receive broadcast television signals – 100 percent of all such units must include DTV tuners effective July 1, 2007. *Id.*

²⁷ See generally, *DTV Tuner Order*, 17 FCC Rcd 15978 (2002).

²⁸ *Implementation of Section 304 of the Telecommunications Act of 1996; Commercial Availability of Navigation Devices and Compatibility Between Cable Systems and Consumer Electronics Equipment*, 18 FCC Rcd 20885 (2003) ("Plug & Play Order").

Under the specifications developed by the cable and consumer electronics industries and adopted in the *Plug and Play Order*, consumers will be able to plug their cable directly into their digital TV set without the need of a set-top box. The new rules will ease the transition to digital TV by promoting competition, convenience, and simplicity for consumers.

21. In addition, we adopted a redistribution control system, also known as the "broadcast flag," for digital broadcast television.²⁹ The goal of the *Broadcast Flag Order* is to prevent the mass indiscriminate redistribution of digital broadcast television in order to foster the transition to digital TV and forestall potential harm to the viability of free, over-the-air broadcasting in the digital age. We found that the current lack of digital broadcast content protection could be a key impediment to the DTV transition's progress.³⁰ Specifically, we found that the absence of such content protection could lead to reduced availability of high value content on broadcast television and thereby harm the viability of free over-the-air television and slow the DTV transition. Given our progress on this front, we expect that such programming will not be unreasonably withheld from over-the-air television.

IV. ISSUE ANALYSIS

A. Channel Election

22. In the DTV *Sixth Memorandum Opinion and Order*,³¹ we determined that, after the transition, DTV service would be limited to a "core spectrum" consisting of current television channels 2 through 51 (54-698 MHz). Although some licensees received DTV transition channels out of the core, and a few have both their NTSC and DTV channels outside the core, there will be sufficient spectrum to accommodate all DTV stations at the end of the transition. At this stage in the transition it is important for licensees with two in-core channels to indicate which one of their channels they prefer to use for digital broadcasting after the transition. In addition, we will require licensees with one in-core channel to make a decision about their in-core channel, and will require licensees involved in negotiated channel election arrangements with other licensees to inform us of these arrangements. This step is critical in determining what channels will be available for stations with two out-of-core channels and in clearing the out-of-core spectrum.

23. In the *First DTV Periodic Report and Order*, we established December 31, 2003, as the channel election deadline for commercial stations.³² Largely due to reports of difficulties some stations were facing in meeting our construction deadlines, we later decided that this date might be too early for some stations and suspended the channel election deadline, announcing that we would use this second periodic review to re-establish the date.³³ We also stated in the *First DTV Periodic Report and Order* that we would resolve in a future DTV periodic review whether and when licensees with one or both of their channels out of the core will have the opportunity to make a channel election as well as the details

²⁹ *Digital Broadcast Content Protection*, 18 FCC Rcd 23550 (2003) ("*Broadcast Flag Order*").

³⁰ *Broadcast Flag Order*, 18 FCC Rcd at 23552, ¶ 4.

³¹ *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, 13 FCC Rcd 7418 (1998) ("*Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*").

³² *First DTV Periodic Report and Order*, 16 FCC Rcd at 5952, ¶14.

³³ *First DTV Periodic MO&O*, 16 FCC Rcd at 20601, ¶18.

and procedures for the election process.³⁴ We stated that in all cases, including licensees with both channels in-core, we reserve the right to select the final channel of operation in order to minimize interference and maximize the efficiency of broadcast allotments in the public interest.³⁵ In the *Second DTV Periodic NPRM*, we stated that our goal was to establish a channel election deadline that gives broadcasters with two in-core channels enough time to make an informed decision about which of their two core channels they preferred to use for digital broadcasting, while at the same time providing licensees with two out-of-core assignments the time to plan their moves to in-core channels before the end of the transition. We proposed that commercial and noncommercial broadcast licensees with two in-core assigned channels make their final channel election by May 1, 2005. As an alternative, we sought comment on whether establishing the same deadline(s) for channel election as for replication and maximization protection and allowing broadcasters more time to increase to full power before they determine which channel is preferable for digital broadcasting would be more effective in speeding the transition.³⁶

24. In this Report and Order, we are establishing firm deadlines for channel elections and a procedure and time frame for evaluating, processing and confirming the elections. These decisions are consistent with the majority of the comments received from a wide range of participants in this proceeding. Most of the commenters that address channel election support establishing a firm deadline for channel election. CEA argues that deferring the election date until after the adoption of repacking and channel election procedures will add significant new delay.³⁷ CEA points out that broadcasters with out-of-core channels, Class A and low power licensees, as well as translator and repeater licensees all must wait to select their in-core channels until broadcasters with in-core channels have made their selections.³⁸ CEA adds that it "strains credulity" to believe that broadcasters will now formulate a channel election and repacking "plan" that has not been possible to formulate in the years since the in-core/out-of-core plan was established.³⁹ CEA asserts that there is no difficult engineering issue, as the final in-core digital channels are for use after analog has shut down and that the Commission should use existing interference criteria in the channel election process.⁴⁰

25. Parties representing the interests of television stations without a paired DTV channel or with out-of-core assignments urge the Commission to adopt an early channel election date that would be no later than May 1, 2005.⁴¹ According to KM Companies, with the first DTV stations going on the air

³⁴ *First DTV Periodic Report and Order*, 16 FCC Rcd at 5952-53, ¶16.

³⁵ *Id.*

³⁶ We discuss replication and maximization interference protection in section IV.B, *infra*.

³⁷ Reply of Consumer Electronics Association ("CEA Reply") at 8.

³⁸ CEA Reply at 12.

³⁹ CEA Reply at 8-9.

⁴⁰ CEA Reply at 9.

⁴¹ See Eastern Television Corporation Comments ("ETC") at 1. See also KM Communications, Inc. and other commonly-owned companies comments ("KM Companies") at 2 (requesting an election deadline of Dec. 31, 2004, if not earlier.). In addition, Davis Television Wausau, LLC ("Davis Television") informs the Commission that stations with single out-of-core assignments face the same time constraints and pressures as those with two, and (continued....)

more than five years ago, the industry has had enough time to evaluate technical aspects of DTV operations in a variety of operating conditions.⁴² Other commenters, particularly those wishing to operate new ventures in the 700 MHz band, also argue that in order to ensure that the transition and attendant recovery of spectrum in the 700 MHz band proceeds in as short a time as possible, the Commission must establish and strictly enforce early channel election deadlines.⁴³ These commenters oppose any extension of the channel election deadline beyond May 1, 2005, and specifically oppose aligning channel election with replication and maximization interference protection deadlines.⁴⁴

26. The Association of Public Television Stations, the Corporation for Public Broadcasting and the Public Broadcasting Service, filing joint comments ("Public Television"), agree that all TV broadcasters – commercial and noncommercial – with two in-core channels should elect their channel by May 1, 2005, but request deadline extensions when the station has obtained a construction extension.⁴⁵ According to Public Television, this will give stations sufficient time to consider propagation patterns, costs and other factors associated with each channel so that they may make their channel election before replication or maximization requirements take effect.⁴⁶ Many other commenters agreed with the proposed May 1, 2005, deadline, and request that the Commission make the procedures for channel election known.⁴⁷ For example, Belo states that it operates an NTSC channel 8 and a DTV channel 9, and because of potential for interference with a nearby DTV channel 9, knowing whether its fully-maximized DTV channel can be carried over to its analog channel on an interference protected basis will be an important factor in its channel election decision.⁴⁸ In their joint comments, MSTV/NAB assert the need for resolution of certain procedural and practical issues, such as: methods of avoiding interference; the order and priorities of elections; opportunities and timing for those with one out-of-core assignment; identifying the purpose of any repacking process; equities to be considered when elections conflict; accounting for pending rulemakings; and unique interference issues faced by broadcasters on channels 2-6 and 51.⁴⁹ Several commenters assert that if the channel election process is not coordinated properly, it

(Continued from previous page)

requests that the Commission address the issue of assignment priority now – stating that the next periodic review will be too late. Davis Television Comments at 2.

⁴² KM Companies Comments at 2. It also states that early election will benefit those with out-of-core assignments as well as Class A and LPTV stations.

⁴³ Motorola Comments at 6; Access Spectrum Comments at 4-5; DataCom Wireless, LLC Comments ("DataCom") at 3; Rural 700 MHz Band Licensees Comments ("700 MHz Licensees") at 5.

⁴⁴ See Access Spectrum Comments at 5; DataCom Comments at 3.

⁴⁵ Association of Public Television Stations, the Corporation for Public Broadcasting, and the Public Broadcasting Service Comments ("Public Television") at 25-26.

⁴⁶ See *Id.*

⁴⁷ Association for Maximum Service Television, Inc. and National Association of Broadcasters ("MSTV/NAB") Comments at 5-6. See also Belo Corp. ("Belo") Comments at 8; Capitol Broadcasting Company, Inc. ("CBC") Comments at 11; Cox Broadcasting ("COX") Comments at 2-3; Tribune Broadcasting Company ("Tribune") Reply at 2-3.

⁴⁸ Belo Comments at 8.

⁴⁹ MSTV/NAB Comments at 5-6.

could lead to excessive interference, resulting in sub-optimal DTV service.⁵⁰ The procedures outlined below respond to each of these concerns.

27. On May 6, 2004, MSTV filed an *ex parte* proposal for a multi-step DTV channel election and repacking process.⁵¹ Under the detailed proposal, the Commission would conduct the channel election process in five steps: (1) Step 1 would be an initial phase to clean up the Commission's DTV database to ensure that stations can make their elections based on accurate and complete information, and would also require all licensees to file certifications about whether they intend to replicate or maximize facilities, as authorized; (2) Step 2 would hold a first round of elections for stations with two in-core channels, followed by elections by stations with two out-of-core channels indicating a preference for three possible channels that they ultimately could use in their market; (3) Step 3 would have the Commission issue "provisional authorizations" where possible, based on the first round of channel elections; (4) Step 4 would hold a second round of elections for remaining licensees, including licensees with two out-of-core channels whose preferences were not accommodated during the first round of elections; and (5) Step 5 would be the finalization of the DTV Table, taking into account general criteria and individual circumstances to resolve conflicts in channel elections.⁵² MSTV's proposed plan would span more than two years, beginning immediately with database cleanup, followed by the first round of elections in June, 2005, and ending sometime after 2006.

28. MSTV asserts that its channel election and repacking plan reflects several values critical to an efficient and effective process that the broadcast industry supports. First, the plan enables stations to make an informed choice about their ultimate DTV channel. Second, it provides clarity in the order of election, thereby permitting a smooth election process. Third, it addresses potential problems posed by DTV operations on low VHF channels. Finally, the plan honors industry expectations for digital operations and respects investments that have already been made.⁵³

29. We initially established December 31, 2003, as the channel election deadline for commercial stations, but suspended the date pending a date to be established in this Order.⁵⁴ We now agree with the commenters, such as CEA and KM Companies, which state that the industry has had enough time to evaluate DTV operations. Circumstances are significantly different from the time we suspended the channel election deadline. At the time, less than 400 of the 1,688 full-power stations with paired DTV channels commenced DTV operations; now more than 1,400 stations have done so. Stations that chose to begin service at lower power have had an opportunity to operate DTV facilities and to test for interference or other service problems. DTV stations have had significant on-air time to conduct the

⁵⁰ MSTV/NAB Comments at 5; Belo Comments at 8; CBC Comments at 11-12; Cox Comments at 2; Tribune Reply at 2-3.

⁵¹ See Special Submission of the Association of Maximum Service Television, Inc. on the DTV Channel Election and Repacking Process, MB Docket No. 03-15, dated May 6, 2004 ("*MSTV Ex Parte*").

⁵² *Id.* at 4.

⁵³ *Id.* at 4-5, 11.

⁵⁴ *First DTV Periodic Report and Order*, 16 FCC Rcd at 5952, ¶ 14; *First DTV Periodic MO&O*, 16 FCC Rcd at 20601, ¶ 18.

necessary tests and evaluate available data in order to make reasoned channel election decisions.⁵⁵

30. We therefore conclude that stations are likely to understand the performance characteristics of the DTV transmission standard and to know which channel they prefer to operate on after the transition, and reject the option that the channel election deadline be tied to replication requirements or DTV tuner penetration rates. As discussed more fully below in section IV.J.2., *infra*, we are adopting the ATSC A/65B ("PSIP") standard and mandating its use by DTV stations. As part of PSIP, a broadcaster's "major channel number" is its NTSC channel number.⁵⁶ This major channel number is the station's channel identity during and after the transition. Therefore, a station's channel election decision will have no effect on the assignment of its NTSC channel number as its "major channel number" in PSIP. Consequently, channel election decisions need not be based on considering stations' historic "branding" to consumers, but instead may be based more on the operating characteristics of a particular frequency and the service populations the stations would project for each channel.

31. We find that the multi-step approach offered by MSTV has merit, and we adopt its proposal with modifications. We agree with many of the goals set forth by MSTV.⁵⁷ First, the channel election process should provide the best possible DTV service to the public. Second, the plan should move the DTV transition along without undue delay. Third, we seek to create an orderly channel election process that produces as much clarity and transparency as possible. Fourth, licensees should be afforded the best opportunity for informed choice when making their channel election decisions. Fifth, we seek to provide every eligible station with a channel for operation after the end of the transition. Sixth, we seek to recognize industry expectations by protecting existing service and respecting investments already made, to the extent feasible. Finally, the channel election process should take into account overall spectrum efficiency, even as we seek to ensure to the extent possible that the final channel allotments accommodate replicated and maximized service areas for those stations certifying their intent to serve such areas.

32. To enable us to complete the reallocations necessary to accommodate all stations with a channel in the core, we need to know each in-core licensee's channel preference as soon as possible. Therefore, we adopt December 2004, as the starting date for channel elections, by which time commercial and noncommercial broadcast licensees with an in-core channel must state their channel preference. As of this date, commercial and noncommercial broadcasters will have had ample time after their applicable digital construction deadlines to make their channel decisions. A December 2004, channel election deadline for in-core licensees will also provide out-of-core licensees time to plan for their move into the core. We recognize that this date is earlier than the election date proposed in the *Second DTV Periodic NPRM*. Given, however, our adoption of a multi-step channel election process as proposed by MSTV and other necessary election procedures, this deadline is necessary to arrive at a final election for all stations in a timely manner. The choice of this election deadline strikes an appropriate balance between the need for stations to have a sufficient amount of time in which to gain experience in

⁵⁵ 47 C.F.R. 73.624(d) required construction to be completed more than two years ago for most commercial broadcasters, fourteen months ago for noncommercial broadcasters, and more than four years ago for top-four network affiliated broadcasters in the top markets.

⁵⁶ See ATSC A/65B, Annex B, Assignment of Major Channel Numbers for Terrestrial Broadcast in the U.S. (March 18, 2003).

⁵⁷ See MSTV *Ex Parte* at 4, 11-20.

DTV operation and allowing stations that will have to move — particularly from out-of-core to in-core — to plan for the DTV channel conversion.

1. Channel Election and Repacking Process / New Allotment Process

33. We adopt a multi-step channel election plan based in considerable part on the MSTV proposal, but which also incorporates certain modifications and refinements. Specifically, we adopt a seven-step channel election and repacking process as follows: (1) Step 1 addresses any preliminary matters to the channel election and repacking process, which includes requiring all licensees to certify their intent to replicate their allotted facilities or maximize their already-authorized facilities; (2) Step 2 is the first round of elections in which in-core licensees (*i.e.*, those with at least one in-core channel) will file their channel election forms; (3) Step 3 analyzes the interference conflicts arising out of the first round and gives licensees an opportunity to resolve them; (4) Step 4 is the second round of elections, at which point the remaining licensees — out-of-core only licensees who have not yet filed channel election forms and those now being treated like them — will make their elections; (5) Step 5 analyzes the interference conflicts arising out of the second round elections, at which time staff will seek to place as many licensees as possible on their election preferences; (6) Step 6 is the third and final round of elections, at which point licensees not yet placed will file a final election preference; and (7) Step 7 is a Notice of Proposed Rulemaking to propose a new DTV Table of Allotments.

a. Step 1: Pre-channel election matters

34. *Database clean up.* We agree with MSTV that it is important for our database to provide a consistent starting point. To that end, we ask that licensees review the accuracy of their database technical information and contact staff as quickly as possible with any submitted corrections.⁵⁸ So that we may consider any proposed corrections to our database, licensees should contact staff by October 1 2004, with any concerns.⁵⁹ To ensure that licensees timely review their database information, we will require them to certify that they have reviewed their database information on file with the Commission and that it is accurate to the best of their knowledge. Licensees will make this certification using the Pre-Election Certification Form, which must be filed by November 2004.⁶⁰ While MSTV proposes a one-year period devoted to “database clean up,” we do not believe such an extended period is necessary. Moreover, we do not believe that there is a need for a formal process to invite licensees to submit information to “clean up the database” because we expect that licensees have informed us of any discrepancies as they arose.⁶¹ We remind licensees that they have an ongoing obligation to ensure the

⁵⁸ Any proposed corrections to database information must be consistent with station authorizations, as reflected in the Commission’s records.

⁵⁹ We note that it may not be possible to process and consider any proposed corrections to database information offered after this date. Database errors that are discovered after this date may be corrected at the discretion of Commission staff.

⁶⁰ The Pre-Election Certification Form will also include licensees’ certifications of their intent to replicate or maximize.

⁶¹ We note that MSTV has notified its members about the need to make sure their database information is accurate, and invited them to contact the Commission and MSTV concerning questions about database inaccuracies or discrepancies. MSTV also asked its members to share this notice with other stations. As a result of this letter dated June 1, 2004, the Commission has received three letters from licensees.

accuracy of their database information and to apprise us of any discrepancies between their authorized facilities and their operations.

35. *Filing freeze.* On August 3, 2004, the Media Bureau imposed a freeze on the filing of certain TV and DTV requests for allotment or service area changes to facilitate the channel election and repacking process.⁶² Included in the freeze are: (i) petitions for rulemaking to change DTV channels within the DTV Table of Allotments, (ii) petitions for rulemaking to establish a new DTV channel allotment, (iii) petitions for rulemaking to swap in-core DTV and NTSC channels;⁶³ (iv) applications to change DTV channel allotments among two or more licensees; (v) petitions for rulemaking by licensees/permittees to change NTSC channels or communities of license; (vi) applications to maximize DTV or analog TV facilities; and (vii) certain Class A station applications. Notwithstanding this freeze, licensees are not prevented from filing modification applications that would resolve international coordination issues⁶⁴ or when a broadcast station seeks a new tower site due to the events of September 11, 2001. In addition, the Media Bureau will consider requests for waiver of the freeze on a case-by-case basis. Such a filing freeze is necessary to provide a stable baseline for developing a final DTV Table of Allotments.⁶⁵ The freeze is discussed more fully in section IV.A.2., *infra*.

36. *Table of station assignment and service information.* As a preliminary matter to the channel election process, the Media Bureau will issue a table of station assignment and service information ("table of station information") for use by TV station licensees and other interested parties so they may determine and evaluate the DTV service populations to be used by the Commission to process stations' channel elections and create the new DTV table of allotments. In developing the table of station information, the Commission will generally use the DTV and NTSC station locations and facilities authorized by license or construction permit (CP)⁶⁶ as of October 1, 2004, a month before TV station licensees will be asked to file their Pre-Election Certification Forms.⁶⁷ We will issue this table of station information prior to the filing of the Pre-Election Certification Forms. (We note that the Media Bureau imposed a freeze on the filing of certain TV and DTV requests for allotment or service area changes in anticipation of generating this table of station information.⁶⁸) The data provided in the table of station

⁶² See Public Notice, "Freeze on the Filing of Certain TV and DTV Requests for Allotment or Service Area Changes," DA 04-2446 (MB rel. Aug. 3, 2004) ("August 2004 Filing Freeze PN").

⁶³ Notwithstanding the freeze, negotiated channel election arrangements may be sought during the election process. See *infra* at ¶ 45.

⁶⁴ We do this to alleviate a burden on those licensees who are actively working to resolve their international coordination issues. See, e.g. Mt. Mansfield Television Inc., *Ex Parte* dated June 28, 2004.

⁶⁵ Our freeze is consistent with MSTV's proposal that the Commission impose a freeze on the filing of DTV channel changes, new DTV allotment requests, and DTV maximization proposals. *MSTV Ex Parte* at 5.

⁶⁶ Where station records include both a construction permit and license, we will use the construction permit given that the changes permitted in the construction permit reflect the station's facilities for the future.

⁶⁷ The Pre-Election Certification Form will require all broadcast licensees and permittees to certify to (1) the accuracy of their database information on file with the Commission, which will be reflected by the table; and (2) their intent to replicate or maximize pursuant to their existing authority, as will be defined by the table.

⁶⁸ August 2004 Filing Freeze PN, DA 04-2446 (MB rel. Aug. 3, 2004).

information will be based on the technical information on file in the Commission database.⁶⁹ We will update the table of station information to reflect service areas based on certifications to build to replication or maximization facilities and any other changes to station facilities prior to the first round election date.

37. *Station service evaluations based on currently authorized operations.* As noted above, we will use current authorized station operations to determine and evaluate the DTV service populations in processing channel elections and creating the new DTV table of allotments. We believe that basing station service evaluations on current authorized station operations will more accurately reflect the current viewer access to station services than the parameters specified for the initial DTV Table of Allotments in 1997, and will at the same time preserve the service areas of those stations that constructed and are operating in accordance with the DTV buildout schedules.⁷⁰ Consistent with MSTV *ex parte* submissions and discussions,⁷¹ we will define new interference as interference beyond that caused by NTSC and DTV operations, as described by the table of station information, in evaluating new interference to post-transition TV operations.

38. On this basis, stations that operate, or plan to operate as authorized by a CP, in accordance with the facilities specified in the initial DTV Table of Allotments will have the same service as that contemplated in the *DTV Second MO&O*, less any changes in interference received from new stations or from stations that changed their operations. Stations that have departed from their initial DTV allotment facilities (including location and/or channel changes) or maximized (or in a few cases reduced) their operations through such modifications and new stations, will have service as authorized in those changes or new authorizations, again less interference from other stations.⁷² In the case of stations whose applications for maximization of DTV facilities are delayed in processing due to international negotiations, we will consider the service that would be provided based on those applications pending the resolution of those coordination issues and authorizations of specific facilities. All analyses of service and reduction of service due to interference will be based on population only. We will use population data from the year 2000 census in determining the populations served by stations and the impact of interference on stations' service. In this regard, the more up-to-date population data from the year 2000 census will provide a more accurate indication of the station service and impacts of interference on that service than the older year 1990 population data used in computing the service data for the initial DTV Table of Allotments.

39. *Border coordination.* We agree with commenters that it is important to resolve international coordination issues as quickly as possible. To that end, we have reduced the number of coordination

⁶⁹ Licensees should review the table of station information before making their pre-election certifications.

⁷⁰ The initial DTV Table of Allotments was set forth in the *Second MO&O on Recon. of the Fifth and Sixth R&Os*, 14 FCC 1348 Appendix B (1998).

⁷¹ See *MSTV Ex Parte*.

⁷² Stations granted a DTV channel change are generally authorized facilities that they requested if such operations do not cause new interference to other stations that exceed the *de minimis* interference standards of section 73.623(c)(2) of the rules, 47 C.F.R. 73.623(c)(2). In some cases the new channel allotment facilities cover more area than the stations were authorized on their initial DTV channel allotment, while in other cases the stations cover less area.

conflicts from several hundred to fewer than 50. We note that some commenters, such as MSTV, have called on the Commission to intensify its efforts to resolve outstanding cases of Canadian and Mexican coordination and interference issues.⁷³ MSTV and other commenters argue that the Commission should resolve Canadian and Mexican coordination issues before channel elections begin.⁷⁴ We cannot, however, delay the implementation of our channel election and repacking process pending resolution of every outstanding case of Canadian or Mexican coordination. Parties with pending applications that are being delayed due to coordination issues are advised that while we will make every effort in negotiating on their behalf, we can provide no assurance that such issues will be resolved favorably. In nearly all of the remaining cases, the licensee can build a checklist facility.⁷⁵ In some cases, additional coordination actions will be needed to provide in-core channel assignments. If an election would require international coordination, then that channel may be elected at authorized replicated and maximized facilities, subject to the outcome of the international coordination.⁷⁶ We encourage stations in markets or regions that require coordination to work together to identify in-core channels that are feasible.⁷⁷ The Commission will continue to work with licensees to resolve remaining international coordination issues as part of the process of developing new DTV allotments and will consider a station's border coordination efforts when prioritizing channel assignments. Border coordination issues are discussed more fully below in section IV.A.3., *infra*.

40. We are aware of some stations with a DTV channel outside of the core and an analog channel inside the core for which, according to the stations, the analog channel is not available for digital transmission because of international coordination issues with Canada.⁷⁸ These stations should indicate this fact on their channel election form and attach a brief explanation of why their in-core channel is not available for digital use under the U.S.-Canada Letter of Understanding, which governs modifications of the initial DTV table of allotments within 400 km of the U.S./Canadian border.⁷⁹ Stations with an out-of-core DTV channel and an in-core analog channel that is not available for digital transmission because of international coordination issues will be treated like stations with two out-of-core channels.

⁷³ *MSTV Ex Parte* at 5-6.

⁷⁴ *Id.* at 6. See also *Mt. Mansfield Ex Parte* at 2.

⁷⁵ Only a few stations cannot build checklist facilities because of border coordination issues. This list includes: WPXJ-DT, Batavia, NY (allotted DTV 53); WNYO-DT, Buffalo, NY (allotted DTV 34); and KAJB-DT, Calipatria, CA (allotted DTV 50).

⁷⁶ We recognize that maximization may cause coordination issues and that successful coordination may require reduction to replication facilities.

⁷⁷ Such arrangements among stations will be accepted as part of the channel election process and will be accorded great weight in determining final assignments.

⁷⁸ See *Vermont ETV, Inc. and Mt. Mansfield Television, Inc. ex parte* (dated March 8, 2004); Letter from John R. Feore, Jr. to W. Kenneth Feree, Chief, Media Bureau, dated May 13, 2004 (citing the problems experienced by three Paxson Communications Corporation stations with Canadian coordination).

⁷⁹ See U.S. and Canada Reach Agreement on Implementing Digital Television Service Along the U.S./Canada Border, Press Release (rel. Sept. 29, 2000) ("LOU"). It is available on the FCC web site at: <http://www.fcc.gov/ib/sand/agree/files/can-bc/can-dtv.pdf>.

41. *Certifications for replication and maximization.* We adopt a requirement, as MSTV has proposed,⁸⁰ that stations that intend to fully replicate or maximize certify this commitment to the Commission by November 2004, subject to sanctions if the station fails to meet its commitment.⁸¹ Licensees will be required to replicate and maximize by the replication/maximization deadline (*i.e.*, July 1, 2005, for affiliates of the top-four networks in markets 1-100; and July 1, 2006, for all other stations).⁸² Further, licensees may only certify to maximize pursuant to their existing authority to do so. Channel elections will be evaluated at this stage based on the coverage that is predicted from the certified authorized maximization or certified replication facilities.⁸³ Such certifications must be filed with the Commission in advance of the channel election date so that all licensees will be able to consider the commitments of other licensees in their channel elections. To provide sufficient time for this information to be useful, we will require that such certifications be filed in November 2004.⁸⁴ Stations that do not submit certification forms by this date will be presumed not to intend to replicate or maximize, and such decision will be taken into account in determining final channel assignments. More specifically, in establishing the authorized facilities and service area for a station not certifying to fully replicate or maximize, we will provide for the station to serve the same geographic area served by its existing DTV facilities, operating as of the certification date. Certifications must be filed electronically and will be made accessible to the public.

42. *Election Forms.* All broadcast licensees participating in the channel election process are required to file a pre-election certification form and a channel election form. Stations that do not timely submit a pre-election certification form will be presumed both (i) to agree that their database technical information on file with the Commission is accurate and complete, and (ii) not to intend to replicate or maximize, and such decision will be taken into account in determining final channel assignments. Stations that do not timely submit a channel election form will be assigned a post-transition DTV channel by the Commission prior to the end of the channel election process. Appendices E and F to this Report and Order illustrate the forms to be used in the channel election and repacking process. We have developed the following six forms: (1) Pre-Election Certification Form; (2) First Round Election Form; (3) First Round Conflict Decision Form; (4) Second Round Election Form; (5) Second Round Conflict Decision Form; and (6) Third Round Election Form. These forms, which are adopted by this Report and

⁸⁰ MSTV *Ex Parte* at 6.

⁸¹ In the Pre-Election Certification Form, licensees will certify their intent to build-out their allotted "replication" facilities or already-authorized "maximization" facilities. Licensees are reminded that false certifications may result in fines and loss of license. Moreover, where stations do not build-out to their certified facilities, we will limit their station's interference protection to the service population within the noise-limited contour predicted from the station's operating facilities, as of the certification date. (In other words, a licensee's failure to replicate or maximize to the extent it certified will result in the loss of interference protection to those service areas not replicated or maximized.)

⁸² See section IV.B., *infra* (for our discussion about the replication/maximization deadline).

⁸³ We anticipate that many licensees will have an opportunity to enlarge their final DTV allotment coverage after the final table has been adopted, pursuant to the rules for changes and applications established then. In developing rules for resolving or avoiding conflicts between stations requesting such coverage enlargements, we will consider giving priority to stations that can demonstrate that they had built-out their full authorized DTV facilities and had been unable to maximize on their transition DTV channel.

⁸⁴ See notes 67 and 81, *supra*.

Order, must be filed electronically and will be made accessible to the public on the Commission's database.

b. Step 2: First round of elections; Election Forms filed

43. We set December 2004 as the date for the first round of channel elections. Although we proposed in the NPRM an election date of May 1, 2005, we believe that the broadcasters making first round elections are able to make an informed statement of their final channel preference at this time. Moreover, given that we will be adopting a multi-step and multi-round approach that will occur over the course of several months, we find that we must begin the process as soon as possible in order to effectuate a timely transition.

44. In this first round, licensees with in-core channels (*i.e.*, licensees with two in-core channels and licensees with one in-core channel) will make their channel elections by filing a First Round Election Form.⁸⁵ Licensees in this round may not elect a channel that is not assigned to them, unless rights to that channel are being sought through a proposed negotiated channel election arrangement.⁸⁶ Upon completion of the first round and subsequent interference conflict analysis, each licensee electing an in-core channel will receive an informal tentative channel designation, to the extent possible. Licensees with two in-core channels (including those with two low VHF channels (*i.e.*, channels 2-6)⁸⁷) will make the first channel elections,⁸⁸ choosing between their two in-core channels. Licensees with only one in-core channel will be required to elect whether to keep their in-core channel, or turn it in and be treated like a licensee with two out-of-core channels.⁸⁹ This will further increase the number of channels available for future selection. Moreover, we are including in this one in-core licensee category those licensees with only one channel (*i.e.*, in-core singletons).

45. *Negotiated Channel Election Arrangements.* As an alternative to the channel election process, licensees may negotiate channel election arrangements with other stations. Such negotiated

⁸⁵ The First Round Election Form will provide up to three options for in-core licensees: (1) elect one of its currently assigned in-core channels; (2) elect a negotiated channel pursuant to an agreement with another licensee(s); or, (3) if (i) a one-in-core licensee, or (ii) a two-in-core licensee with two low VHF channels (*i.e.*, channels 2-6), then such a licensee may choose to make no election in the first round and instead elect to participate in the second round of elections.

⁸⁶ Licensees that have negotiated channel election arrangements with other licensees must obtain Commission approval for the proposed channel changes in the arrangement in order for their election of a negotiated channel to be considered valid.

⁸⁷ We will permit two in-core low VHF licensees to release both of their channels in the first round and agree to be treated as two out-of-core licensees and participate in the second round of elections. See note 129, *infra*. Licensees that choose to elect, and which receive a tentative channel designation for, their in-core low VHF channel will have an opportunity to make an alternate election in the third round. See section IV.A.1.f., *infra*.

⁸⁸ This follows the MSTV plan, which proposes a first round of elections (for June 2005) in which licensees with two in-core channels would notify the Commission whether they want to stay on their DTV channel or revert to their NTSC channel. *MSTV Ex Parte* at 7.

⁸⁹ We believe that, by this time, one in-core licensees should know whether they intend to keep their in-core channel.

arrangements are subject to Commission approval, including particular consideration of the effect on the channel election rights of, and interference impact on, any licensee not a party to the negotiated channel election agreement. "Channel swapping" is an existing practice with beneficial results for the marketplace and consumers, and these channel election arrangements are similar in nature to them.⁹⁰ We do not anticipate that channel election arrangements are likely to have anti-competitive effects. We will, however, review them for such effects. All licensees involved in a negotiated channel election arrangement must file a channel election form⁹¹ to select the channel they would use for digital operations after the transition if the negotiated channel election arrangement is approved, as well as the channel they would elect if the negotiated arrangement is not approved.⁹² Evidence of a signed negotiated channel election arrangement and technical engineering information demonstrating compliance with Section 73.623(g) must be submitted to the Commission to enable us to consider negotiated channel election arrangement requests.⁹³ We will review all agreements to assure compliance with the public interest and will not approve agreements proposing the acceptance of significant levels of interference or loss of service.

46. *Election of DTV in-core channel.* We conclude, as MSTV has proposed,⁹⁴ that if a two in-core licensee elects its DTV channel, then its NTSC channel will be released.⁹⁵ The DTV channel will be "locked in"⁹⁶ (i.e., channel will be protected⁹⁷ to the extent certified against future elections, except

⁹⁰ See *Sixth Report and Order in the Matter of Advanced Television Systems and their Impact Upon the Existing Television Broadcast Service*, 12 FCC Rcd 14588, 14655 (1997). See also 47 C.F.R. § 73.623(g).

⁹¹ Licensees will be asked to indicate their negotiated channel elections on their channel election forms.

⁹² Stations involved in the negotiated channel election arrangement must satisfy our DTV interference rules with regard to their relationship to other stations not involved in the negotiated arrangement.

⁹³ See 47 C.F.R. § 73.623(g). In order to demonstrate the validity of their negotiated channel election arrangements, licensees will be required to provide the name(s) and call sign(s) of the other licensees involved in the arrangement. Licensees may, upon request, be required to provide a copy of the negotiated channel election agreement and/or engineering information to the Commission. The Commission may contact proponents of these arrangements, as may be necessary.

⁹⁴ See *MSTV Ex Parte* at 7 (licensees electing their DTV channel would relinquish post-transition rights to their NTSC channel).

⁹⁵ By "release," we mean that the licensee relinquishes its post-transition rights to this channel and that the channel now becomes available for future selection by another licensee.

⁹⁶ By "locked in," we mean that the channel assignment is confirmed. However, the amount of interference the station is subjected to may increase to some extent in the Final Table in an effort to provide all licensees with an in-core DTV channel that replicates their analog service, to the extent the station has certified intent to so replicate. In other words, even though channels may be "locked in," licensees may be required at the end of the allotment process to accept interference resulting from establishment of DTV stations at full replication facilities to accommodate all stations with a channel in the DTV core spectrum. This system of "locking in" channels can be viewed as making an informal tentative channel designation to that licensee. While informal tentative channel designations in themselves cannot confer legal rights to licensees, they do come with a heavy presumption that these informal designations will be the channel assignments proposed in the new DTV Table of Allotments.

⁹⁷ By "protected," we mean that a subsequent election may not cause an interference conflict to a "locked in" channel to the extent the "locked in" station's coverage is certified, except against interference that may result from (continued....)

against interference that may result from establishment of DTV stations at full replication facilities to accommodate all stations currently allotted an out-of-core DTV channel with a channel in the DTV core spectrum). We recognize that a station that ends up keeping its in-core DTV channel as its final allotment might not have to incur any additional construction expenses. In contrast, a station that ends up operating in digital on its analog allotment would need to incur expenses to change its DTV operation to another channel. To allow stations to minimize the cost of this phase of the DTV transition whenever possible, we will afford the highest priority in the allotment process to maintaining existing DTV allotments selected on the channel election forms.

47. *Election of NTSC in-core channel.* If a two in-core licensee elects its NTSC channel, then Commission staff will determine whether and to what extent DTV operations on this channel would cause new interference to the service populations of other DTV stations. For purposes of this analysis, DTV service populations will be those resulting from the allotted "replication" facilities or authorized "maximization" facilities, as certified. This interference conflict analysis will take place in Step 3, when we intend to resolve, to the extent possible, the interference conflicts resulting from the first round of elections.⁹⁸

48. We do not expect there to be widespread difficulties in fitting replicated DTV service into paired NTSC channels, as paired DTV channels were initially designed to be the best approximation of the NTSC Grade B contours. However, the interference relationships between DTV to DTV and NTSC to DTV operations are such that a DTV station would have a 1 dB greater interference impact on another co-channel DTV station than a NTSC station and an 8 dB greater impact on adjacent channel DTV station than an NTSC station, assuming the same coverage and locations for all stations. Thus, it is likely that in some cases DTV operation on an associated NTSC channel could result in new interference.⁹⁹ For those stations electing their NTSC channel for their eventual in-core DTV channel, we will attempt to accommodate the broadcasters' authorized maximized facilities into the NTSC "destination" channels.¹⁰⁰

(Continued from previous page)

establishment of DTV stations at the end of the allotment process at full replication facilities to accommodate all stations with a channel in the DTV core spectrum. An interference conflict would occur where interference exists any greater than existing interference plus no more than 0.1 percent additional reduction in service population. For purposes of this process, we will use this 0.1 percent interference protection standard proposed by MSTV. We agree with MSTV that "protect" in this context should mean that a subsequent election may not cause interference any greater than existing interference plus no more than 0.1 percent additional reduction in service population. See *MSTV Ex Parte* at 6, n.7.

⁹⁸ See section IV.A.1.c., *infra*.

⁹⁹ In such cases, it may be possible to resolve the new interference by reducing the DTV station's operating facilities. We would allow stations to make such adjustments to address such conflicts.

¹⁰⁰ As discussed in section IV.B., *infra*, except for stations with out-of-core DTV channel allotments, stations failing to serve their authorized maximized service area by our replication/maximization deadlines will lose interference protection to any unserved areas. In addition, the Community Broadcast Protection Act of 1999 provides an interference protection priority to Class A TV stations with respect to certain maximized DTV facilities. Specifically, Class A stations are entitled to a protection priority with respect to those maximized DTV facilities, including technically necessary adjustments to those facilities, for which an applicant had not filed an application for maximization nor a notice of its intent to seek such maximization by December 31, 1999, or, if a notice of intent was timely filed, did not also file a bona fide application for maximization by May 1, 2000. 47 U.S.C. § 336(f)(1)(D). See also, 47 C.F.R. § 73.623(c)(5). Thus, DTV broadcasters that did not meet these (continued....)

However, if a broadcaster's maximized DTV service area cannot be carried over to an NTSC channel or another DTV channel as part of a channel swap arrangement or it is not otherwise willing to reduce its operations, we may find it necessary to base its use of the new channel on its replication facilities or to assign the broadcaster another channel in the market that can accommodate its maximized facilities as part of the process of generating a new Table.

49. *Elections by one in-core licensees.* Licensees with only one in-core channel (including singletons¹⁰¹), including those with low VHF channels (2-6), must elect to either (1) keep their in-core channel or (2) release their in-core channel in favor of being treated like a licensee with two out-of-core channels. MSTV proposed that we assume that such stations would decide to remain on their in-core channels; however, we find that it is more efficient to determine which in-core channels are unacceptable to these stations so that those channels can become available for future elections and to ensure that those stations are given an opportunity to identify a workable channel.

50. We expect that in most cases stations with only one in-core channel, where the channel is a DTV channel, will choose to remain on that channel. In such cases, that channel will be "locked-in," as defined above. If the one in-core licensee chooses not to elect its in-core DTV channel, then that channel will be released, and the licensee will be treated as a two out-of-core licensee.¹⁰² Licensees with only one in-core channel (including singletons), where the in-core channel is the NTSC channel, must elect to either (1) keep their in-core NTSC channel or (2) release their in-core NTSC channel in favor of being treated like a two out-of-core licensee. If a one in-core licensee elects its NTSC, then Commission staff will determine (in Step 3's "interference conflict analysis") whether and to what extent this NTSC channel would cause new interference to the service populations of DTV stations. In light of their status, in-core NTSC channels of one in-core licensees will be afforded a high priority in permitting their conversion to a DTV channel.¹⁰³

51. *Later opportunity to change elections of low VHF channels and channels subject to international coordination.* Licensees electing, and receiving a tentative channel designation for, a low VHF channel or a channel subject to a pending international coordination issue will be permitted to seek an alternate tentative channel designation in the third round of elections. See discussion in section

(Continued from previous page)

statutory filing deadlines are not entitled to carry over to their NTSC channels maximized DTV facilities that would conflict with a Class A TV station. See *Class A Order*, 15 FCC Rcd at 6379, ¶ 60.

¹⁰¹ "Singletons" or "single-channel licensees" refers to those licensees that do not have a second or "paired" channel to convert to DTV. In 1998, in the "Service Reconsideration Order," the Commission decided to afford new NTSC permittees, whose applications were not granted on or before April 3, 1997, and who were therefore not eligible for an initial DTV paired license, the choice to immediately construct either an analog or a digital station on the channel they were granted. Pursuant to this policy, the Commission specified that these new NTSC permittees, which we now sometimes refer to as "singletons" or "single-channel licensees," would not be awarded a second channel to convert to DTV, but could, instead, convert on their single 6 MHz channel. It was further decided that if they choose initially to build an analog station, they may request Commission authorization to convert to DTV at any point during the transition, up to the end of that period. See *Service Reconsideration Order*, 13 FCC Rcd at 6865, ¶ 11 (1998).

¹⁰² In being treated like a two out-of-core licensee, the licensee will be required to file a new election form in the second round of elections (See Step 4). See IV.A.1.d., *infra*.

¹⁰³ See note 101, *supra*.

IV.A.1.f., *infra*.

52. *No first round election for two out-of-core licensees.* Licensees with two out-of-core channels will not make an election in the first round. Requiring two out-of-core licensees to elect at this time would be premature and unnecessarily limit the channel choices available to these licensees. We disagree with MSTV that it would be beneficial for two out-of-core licensees to make elections in the first round a month after the two in-core licensees have elected.¹⁰⁴ We note, for example, that under MSTV's plan two out-of-core licensees would not know at this time whether a two in-core licensee selecting its NTSC channel in the first round would ultimately obtain that election.¹⁰⁵ MSTV would have two out-of-core licensees protect both channels of two-in-core licensees electing their NTSC channel, effectively denying two out-of-core licensees' the ability to select certain otherwise available channels. Accordingly, as will be discussed below, two out-of-core licensees will make their elections in the second round, at which point two in-core and one in-core licensees may already have a channel "locked in" (as defined above) and have released an in-core channel, making that in-core channel available for future selection.

**c. Step 3: First round interference conflict analysis and tentative designations;
Conflict Forms filed**

53. The interference conflict analysis contemplated in our Step 3, which we expect to complete by February 2005, will determine whether and to what extent an elected in-core NTSC channel would cause interference to an existing or proposed in-core DTV channel. Using objective computer analysis, we will identify and communicate interference conflicts arising from the first round. We agree with MSTV that knowing what channels are available for selection in the second round is important in order to provide second round electors with an informed choice among all channels remaining after completion of the first round. Accordingly, through the interference conflict analysis process, we will set tentative channel designations for in-core licensees with channels that have been elected in the first round and "locked in."

54. Specifically, through our first round interference conflict analysis, Commission staff will determine whether and to what extent an elected in-core NTSC channel causes an interference conflict to: (1) an in-core DTV channel that was elected in the first round; (2) an in-core DTV channel of any licensee that elected its NTSC channel in the first round that still may need to revert to its DTV channel; or (3) another elected in-core NTSC channel in the first round.¹⁰⁶

55. Upon completion of our first round interference conflict analysis, the Media Bureau will

¹⁰⁴ MSTV has proposed that, a month later in the first round (proposed as July 2005), licensees with two out-of-core channels would file a notice with the Commission specifying a preference for three possible channels, subject to the requirement that they protect first round elections, as well as all existing in-core DTV stations and the in-core channels of one in-core licensees (which includes licensees with two in-core channels that elected their in-core NTSC channel).

¹⁰⁵ This situation would not be resolved until Step 3, through interference conflict analysis. See section IV.A.1.c., *infra*.

¹⁰⁶ We note that the nature of the interference conflict differs with respect to an elected NTSC channel of a one-in-core station, which enjoys a special status, as opposed to an elected NTSC channel of a two-in-core station, which has the option to change its election to its currently assigned DTV channel.

issue a letter to each licensee determined to cause an interference conflict(s). Licensees with interference conflicts will have 60 days from the date of this conflict notification letter in which to file their First Round Conflict Decision Forms, indicating how they intend to resolve their interference conflict. These First Round Conflict Decision Forms, which we expect to be filed in April 2005, will provide licensees with the opportunity to decide whether to maintain their in-core NTSC election, change their election to their in-core DTV channel, or, if a one-in-core licensee, elect to participate in the second round.¹⁰⁷ Licensees can maintain their in-core NTSC election if they resolve their interference conflict by (1) agreeing to accept interference and reduce facilities;¹⁰⁸ and/or (2) negotiating an agreement (i.e., conflict resolution agreement) with the licensee(s) with which they are in conflict.¹⁰⁹ Licensees currently allotted an out-of-core DTV channel will be afforded the opportunity for full replication facilities on an in-core DTV channel, unless they choose to accept less. The licensee may agree to accept interference as long as it is still able to serve all of its community of license.¹¹⁰ If the conflict is thus resolved, the licensee's currently assigned in-core DTV channel is released. After receipt of the First Round Conflict Decision Forms, we will announce any additional channel elections that have been "locked in" as tentative channel designations. Based on this information, second round electors will be able to determine which channels will be available for selection in the second round of elections.

56. An interference conflict exists when it is determined that more than tolerable new interference exists (i.e., in this context, 0.1 percent in addition to existing interference). If it is determined that no interference conflict exists (meaning in this context that the elected in-core NTSC station adequately protects stations in each of the three categories noted above, to the extent required), then the licensee's elected NTSC channel will be "locked in" and its DTV channel will be released, if applicable. If it is determined that an interference conflict does exist, and would therefore prevent granting the in-core NTSC channel election with the certified coverage, then the licensee must decide whether to reduce its facilities to eliminate the interference,¹¹¹ or change its election to its DTV channel, or be treated as a two out-of-core licensee if its paired DTV channel is out of core.¹¹² The licensee may agree to reduce its facilities to eliminate interference as long as it is still able to serve all of its community of license. With regard to stations with an allotted out-of-core DTV channel electing to operate a DTV station on their in-core NTSC channel, we will permit the 0.1 percent additional

¹⁰⁷ Two in-core licensees may not release both in-core channels to participate in the second round of elections, except for the case of two in-core low VHF channels. See note 87, *supra*. We note that two in-core licensees already have the advantage of having an in-core DTV channel.

¹⁰⁸ In choosing this option, licensees would have to agree to accept interference or reduce facilities, as necessary. Licensees must certify that they will resolve their interference conflict(s), and will be required to demonstrate such by submitting technical engineering data.

¹⁰⁹ In choosing this option, licensees would have to negotiate a settlement with the licensee(s) with which they are in conflict. Licensees must certify that they will resolve their interference conflict(s), and will be required to demonstrate such by submitting evidence of a negotiated conflict resolution agreement and supplying engineering information, as may be necessary. Licensees' submissions must evidence compliance with 47 C.F.R. § 73.623(g).

¹¹⁰ See generally, 47 C.F.R. § 73.625. See also 47 C.F.R. §§ 73.622, 73.623.

¹¹¹ Licensees electing to reduce their facilities will be required to submit data demonstrating specifying how they will eliminate the interference conflict.

¹¹² As noted above, the licensee will indicate its decision by filing a conflict decision form.

interference limit to be exceeded on a limited basis in order to afford these stations an improved opportunity to select their NTSC channel.¹¹³ Such allowance is justified because these single channel licensees have only one in-core channel to select and may need this additional accommodation. We are concerned, however, that such operations not cause substantial interference to existing DTV service (e.g. interfering within the area in which service replication is already being achieved by an operating station). Although we do not expect such instances will be widespread, where we find it appropriate to do so, we may ask a station seeking DTV operation on its in-core NTSC channel to operate at a power level that would avoid large amounts of interference to existing DTV operations, even if this would preclude that station from operating with full replication facilities. Licensees should be aware that the burden is on them to ensure that the channel they elect can serve their community of license.¹¹⁴ Consequently, should it be determined when proposing a final DTV Table of Allotments that a licensee's election does not cover its community of license, we will void that election and place the licensee on a more appropriate channel.

57. The interference conflict analysis performed in the first round is illustrated through the following examples. In the case of a two-in-core licensee whose election of its in-core NTSC channel causes an interference conflict which prevents granting the in-core NTSC channel with the certified coverage, the licensee will file a conflict decision form indicating whether it will accept its in-core NTSC channel with interference and reduced facilities or if it will revert to its DTV channel. The channel selected at this time would be "locked in" and the other channel would be released. In the case of a licensee with only one in-core NTSC channel (including singletons) that elected its in-core NTSC channel and an interference conflict was found that would prevent granting coverage to extent certified, the licensee will file a conflict decision form indicating whether it wishes to accept its in-core NTSC channel with interference or if it wishes to be treated as a two out-of-core licensee and file an election in the second round (see Step 4). Licensees are cautioned that it is possible that they may obtain a less preferable tentative channel designation than had they decided to keep their in-core NTSC channel election with interference and reduced facilities.¹¹⁵

d. Step 4: Second Round Election Forms filed

58. In our second round of elections, which we expect to occur July 2005, licensees with two out-of-core channels and those now treated like them,¹¹⁶ will be required to file a Second Round Election Form.

59. *Two out-of-core licensees.* In their Second Round Election Form, two out-of-core licensees

¹¹³ See note 101, *supra*.

¹¹⁴ See, generally, 47 C.F.R. §§ 73.622, 73.623.

¹¹⁵ We note that these licensees may include their reduced-facilities NTSC channel on their list of second round election preferences. There would be, however, no guarantee that their discarded in-core channel would be awarded back to them should their higher second round election preferences not be available to them.

¹¹⁶ This category includes those first round electors that indicated in their conflict decision forms that they wanted to be treated as two out-of-core licensees, rather than accept their in-core NTSC channel with interference and reduced facilities. Also included in this category are licensees that do not have an in-core channel (e.g., an out-of-core singleton).

may submit one channel election preference¹¹⁷ or may request that the Commission determine a "best available" channel (*i.e.*, one that minimizes new interference to all protected channels) for them at full replication facilities.¹¹⁸ Second round electors may also submit one contingent channel preference which would be available for selection only if the licensee rescinds its original second round election as part of a negotiated conflict resolution or settlement agreement with another licensee.¹¹⁹

e. Step 5: Second round interference conflict analysis and tentative designations

60. We recognize that there may be a sizable number of election preferences filed in the second round and that licensees may list conflicting channel preferences. Second round electors may also be asked to accept a channel with interference and reduced facilities because of an interference conflict with a protected channel. In anticipation of these issues, our second round interference conflict analysis, which we expect to complete by September 2005, offers a process of identifying and resolving such interference conflicts. We will evaluate election preferences for interference conflicts (as defined above), and "lock in" second round election preferences as tentative channel designations, to the extent possible. We will accommodate the election preference of each licensee to the extent possible, but cannot guarantee that licensees will receive their selected channel. The Second Round Conflict Form will provide second round electors with the opportunity to decide whether the interference and reduced facilities to which they would have to agree to obtain their channel preference would be acceptable to maintain their election preference. Second round electors unwilling to accept its election preference with interference and reduced facilities or that otherwise cannot resolve their interference conflict may participate in the third round of elections.¹²⁰

61. Upon completion of our second round interference conflict analysis, the Media Bureau will notify each licensee that is determined to cause an interference conflict(s). Licensees will have 60 days from the date of this conflict notification letter in which to file their Second Round Conflict Decision Forms, indicating how they intend to resolve their interference conflict. These Second Round Conflict Decision Forms, which we expect to be filed in November 2005, will provide licensees with the opportunity to decide whether to maintain their second round channel elections or instead participate in the third round. Licensees have several options available to them. Licensees can maintain their second round channel election if they resolve their interference conflict by (1) agreeing to accept interference

¹¹⁷ Two out-of-core licensees may negotiate channel election arrangements with other licensees. *See, supra*, discussion of negotiated channel election arrangements in the First Round.

¹¹⁸ Two out-of-core licensees wishing to ensure receipt of a tentative channel designation in the second round should consider making a Commission-determined "best available" channel their election preference. Thus, licensees that request that the Commission determine a "best available" channel for them at full replication facilities will be placed by Commission staff in this round.

¹¹⁹ We do this in an effort to encourage licensees to resolve conflicting channel preferences through settlement negotiations. Licensees may also request that the Commission determine a "best available" channel for their contingent preference.

¹²⁰ We believe that in many cases of conflicting second round channel preferences, licensees will be able to reach settlement agreements, thereby avoiding the necessity of having the Commission resolve their conflict after the third round of elections. *See, supra*, discussion of negotiated conflict resolution agreements in the First Round conflict analysis.

and reduce facilities;¹²¹ and/or (2) negotiating an agreement (*i.e.*, conflict resolution agreement) with the licensee(s) with which they are in conflict.¹²² Licensees can decide to change their election to their contingent second round channel by entering into a negotiated channel election arrangement with another licensee whereby they surrender rights to their original channel preference to that licensee.¹²³ Finally, licensees can decide that they are not willing to accept their election preference with interference and reduced facilities or that they cannot otherwise negotiate a resolution to their interference conflict and elect to participate in the third round of elections.¹²⁴ We note that where more than one station elects the same channel and those stations cannot negotiate a settlement agreement, the subject channel will become unavailable for selection in the second round and licensees will have the opportunity to select that channel in the third round.¹²⁵ After receipt of the Second Round Conflict Decision Forms, we will announce any additional channel elections that have been "locked in" as tentative channel designations.¹²⁶ Based on this information, third round electors will be able to determine which channels are available to them for selection.

f. Step 6: Third and final round of elections

62. We will hold a third round of elections, expected to occur in January 2006, to find channels for licensees that were not "locked in" at tentative channel designations in the previous two rounds. This third round provides a subsequent round for two out-of-core licensees whose election preferences could not be accommodated in their initial round of elections. We agree with MSTV that these licensees, as well as any other licensees that remain unplaced at this time, should be afforded the opportunity to make one additional channel election preference.¹²⁷ Election preferences made in this round must protect all "locked in" channels.¹²⁸ If a licensee is not able to specify a preferred channel on which it can operate

¹²¹ Licensees must certify that they will resolve their interference conflict(s), and will be required to demonstrate such by submitting technical data.

¹²² Licensees must certify that they will resolve their interference conflict(s), and will be required to demonstrate such by submitting evidence of a negotiated conflict resolution agreement and supplying engineering information, as may be necessary.

¹²³ Licensees may use their contingent channel election only in the context of a negotiated settlement with another licensee, and may not use their contingent channel election at all if such use would result in an interference conflict.

¹²⁴ We believe that in many cases of conflicting second round channel preferences, licensees will be able to reach settlement agreements, thereby avoiding the necessity of having the Commission resolve their conflict after the third round of elections.

¹²⁵ As noted below, the Commission will resolve third round conflicts pursuant to certain criteria. *See infra* section IV.A.1.f.

¹²⁶ Upon completion of the second interference conflict analysis and tentative channel designations, we expect that only a small number of licensees will remain with no channel "locked in." These licensees will be afforded an opportunity to file one additional election preference in the third and final round of elections.

¹²⁷ These licensees will file a Third Round Election Form.

¹²⁸ Participants in the Third Round may elect from available channels and may file negotiated channel election arrangements. *See, supra*, discussion of negotiated channel election arrangements in First Round and Second Round channel elections.

satisfactorily without conflicting with a protected channel, it may ask the Commission to specify a channel for its use at full replication facilities. In such cases, the Commission will select a channel that minimizes new interference among all affected stations.

63. In this third round, we will also permit licensees with a low VHF channel or a channel subject to international coordination issues to seek an alternate tentative channel designation.¹²⁹ Specifically, to the extent a preferred channel is available in this final election round, we will allow such licensees to elect a different channel for their final DTV operations, notwithstanding that they have an elected and "locked in" channel. These licensees may also request that the Commission determine a "best available" channel for them at full replication facilities.¹³⁰ No other licensees with an elected (and "locked in") channel will be permitted to participate in this third and final round of elections.

64. *Conflicts among third round preferences.* In deciding among third round election preferences, we will determine on a case-by-case basis what channel best replicates a station's service area while minimizing new interference to other stations.¹³¹ This analysis includes considerations of service to the public – including service to local communities¹³² – and overall spectrum efficiency. We will also consider in our analysis those factors enumerated by MSTV: (1) whether the station was an early adopter of DTV technology (*i.e.*, the length of time the station has been operating on DTV); (2) the impact on the public's access to DTV services (*i.e.*, the population served by the station's digital signal and the percentage of replication population covered); (3) whether one or both of the station's channels is/are in the low VHF band (which might weigh in favor of that station receiving priority); (4) whether coordination with or interference to or from Canada or Mexico is a problem; (5) the existence of any zoning, environmental or other such issues; and (6) any other factors that may be relevant at the time.¹³³

¹²⁹ Some commenters contend that in some cases low VHF channels may not offer licensees the ability to provide the best DTV service to the public. *See, e.g., MSTV Ex Parte* at 16-17; and *Capitol Broadcasting Ex Parte* dated July 27, 2004 at 1. Although the data are incomplete at this time, we are persuaded that low VHF licensees should be afforded an additional opportunity to find a channel that may better serve the public. For this reason, we will also permit two in-core low VHF licensees to release both of their channels after the first round so that they may be treated as two out-of-core licensee and participate in the second round of elections. MSTV proposed an additional election round for licensees who found their prior election unacceptable and contemplated that licensees which had to choose between two low VHF channels would be among those possibly dissatisfied licensees. *MSTV Ex Parte* at 8. Stations with international coordination issues may also need this additional flexibility in the event that the channel initially elected does not receive international clearance at the expected facilities.

¹³⁰ We note that it may not be possible to accommodate these preferences. Moreover, it is possible that the low VHF channel may be the best available channel for the licensee.

¹³¹ If, for example, the channel elected conflicts with a DTV channel tentatively designated for post-transition use by another station, the Commission will resolve the conflict by determining the best available channel for the licensee, as described herein.

¹³² Considering licensees' ability to reach and provide coverage to local communities is consistent with the Commission's statutory obligation to ensure that broadcasters are responsive to the needs and interests of local communities. *See* 47 U.S.C. § 307(b) (in which Congress directed the Commission to "make such distribution of licenses, frequencies, hours of operation, and power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same").

¹³³ *Id.* at 9-11.

g. STEP 7: New DTV table of allotments and authorizations proposed and adopted through rulemaking process

65. After completion of our channel election and repacking process, expected by August 2006, we will issue a Notice of Proposed Rule Making to propose a New DTV Table of Allotments. In creating the new DTV allotments proposals, we will provide all eligible stations with channels for DTV operations after the transition. In developing the new allotments, we will attempt to accommodate the preferences of broadcasters to the extent possible.¹³⁴ Our proposed Table will be based on the tentative channel designations established through our channel election process, as well as on our evaluation of overall spectrum efficiency and providing the best service to the public, including service to local communities.¹³⁵ In the NPRM, we will seek comment on our proposed new DTV Table of Allotments.

66. Only Commission licensees and permittees will participate in the channel election process. Applicants for new stations and petitioners for new allotments will not make elections. We note that there are remaining applications that have been pending since before 1997 to obtain approximately 50 new NTSC stations. These applications will be dismissed if found to be inconsistent with the current protection requirements. In developing the post-transition DTV table, we will generally protect those NTSC allotments with pending new station applications that have "cut-off" status (do not face an additional opportunity for filing of mutually exclusive applications). This is consistent with the protection that must be afforded by DTV applications pursuant to Section 73.623(h)(2) of the rules. An exception to this protection is that we will not protect the existing channel allotment where the applications are associated with a rule making petition that requests another channel (but may protect the new channel proposed in the rule making petition in accordance with the discussion that follows). For mutually-exclusive groups of applications where there is a settlement, or the tentative selectee is known, we will consider the facilities proposed by the prevailing applicant in the settlement group or the tentative selectee. We will continue to process these protected applications to grant of an NTSC construction permit and note that these will be new single-channel stations, allowed to choose between NTSC and DTV operation during the transition, but required to become DTV at the end of the transition. At the conclusion of the channel election and repacking process, remaining unprotected new station applications will be evaluated and may be accommodated with a post-transition DTV allotment or dismissed when we issue the NPRM proposing the new DTV Table of Allotments.

67. Pursuant to opportunities the Commission provided, some of the pre-1997 NTSC applicants have continued to pursue a new station authorization by filing rule making petitions requesting a different NTSC channel or a DTV channel.¹³⁶ In addition, some petitions have been filed seeking DTV channel allotments for new stations. These pending NTSC and DTV rule making proposals will be dismissed if

¹³⁴ To clarify as requested by Cox Broadcasting, the process will account for interference agreements among stations under Section 73.623(g) and will generally preserve the protection afforded by those agreements. See Cox Comments at 2.

¹³⁵ See note 132, *supra*.

¹³⁶ See Public Notice, "Mass Media Bureau Announces Window Filing Opportunity For Certain Pending Applications and Allotment Petitions For New Analog TV Stations," 14 FCC Rcd 19559 (MB rel. Nov. 22, 1999) ("November 1999 Window Filing PN"); and Public Notice, "Mass Media Bureau Announces Window Filing Opportunity For Certain Pending Requests For New NTSC Television Stations On Channels 52-59," 17 FCC Rcd 2155 (MB rel. Feb. 6, 2002) ("March 2002 Window Filing PN").

found to be inconsistent with the current protection requirements. Each rule making request, including those associated with applications and those seeking new DTV allotments, falls into one of three groups: (1) pending petitions for rulemaking; (2) outstanding rule makings (Notice of Proposed Rule Making issued); or (3) completed rule makings that now have pending applications for a construction permit. We will attempt to protect allotments and proposed allotments in the second and third groups where we have already adopted a Notice of Proposed Rule Making or a Report and Order to establish a channel allotment. Protection of these rule making proceedings is consistent with the requirements placed on DTV applications by Section 73.623(h)(2) of the rules. However, we advise these petitioners that there may be a few cases where we must modify, restrict or eliminate their requested allotment in order to accommodate all eligible broadcasters with a post-transition DTV allotment. Remaining rule making petitions will be evaluated at the conclusion of the channel election and repacking process and may be accommodated with a post-transition DTV allotment or dismissed when we issue the NPRM proposing the new DTV Table of Allotments.

2. Freeze of Procedures to Change Allotments

68. A stable database is not only crucial to the channel election process, but is vital to the completion of the technically difficult task of developing a new DTV Table of Allotments. To make the channel election process and the creation of the new DTV Table of Allotments as manageable as possible, the Media Bureau has temporarily suspended certain procedures for altering DTV and analog TV service areas and channels until after the new DTV Table of Allotments is complete.¹³⁷ We will continue to process rulemakings in which a Notice of Proposed Rule Making has been issued prior to the adoption of this Order. Additionally, the Media Bureau staff is directed to dismiss all pending petitions to change the NTSC Table of Allotments in which a Notice of Proposed Rule Making has not been issued prior to the adoption of this Order.¹³⁸ Pursuant to the freeze, the Media Bureau we will not accept for filing, until further notice, the following:

- Petitions for rulemaking to change DTV channels within the DTV Table of Allotments.¹³⁹
- Petitions for rulemaking for new DTV allotment proceedings.¹⁴⁰
- Petitions for rulemaking to swap in-core DTV and NTSC channels.¹⁴¹

¹³⁷ See August 2004 Filing Freeze PN, DA 04-2446 (MB rel. Aug. 3, 2004).

¹³⁸ We note that the Media Bureau staff previously dismissed or denied a number of petitions for new or changed NTSC allotments on various grounds, thereby declining to issue a Notice of Proposed Rule Making for these petitions. Several petitioners have sought reconsideration or review of these actions. In view of our decision to dismiss all pending petitions for new NTSC allotments which have not been subject to the Notice process, all pending petitions for reconsideration or review of NTSC allotment requests that have not advanced to the Notice stage are hereby dismissed.

¹³⁹ 47 C.F.R. §§ 73.622, 73.623.

¹⁴⁰ 47 C.F.R. § 73.622.

¹⁴¹ In the NPRM, we sought comment on whether we should allow stations to use an application process to make these swaps. We proposed to require that parties meet the spacing requirements for amending the analog Table of Allotments pursuant to 47 C.F.R. § 73.610 and to allow parties to use Longley-Rice analysis to demonstrate that an analog TV station protects DTV stations and for amending the DTV Table of Allotments pursuant to 47 C.F.R. § 73.623. We invited comment on these proposals and on how the Commission should address any loss of analog (continued....)

- Applications to change DTV channel allotments among two or more licensees.¹⁴²
- Petitions for rulemaking by licensees/permittees to change NTSC channels or communities of license.
- Television modification applications that would increase a station's DTV service area in channels 2-51 in one or more directions beyond the combined area resulting from the station's parameters as defined in the following: (1) the DTV Table of Allotments; (2) Commission authorizations (license and/or construction permit); and (3) applications on file with the Commission prior to release of this Order; and television modification applications that would increase a station's analog service area in channels 2-51 in one or more directions beyond the combined area resulting from the station's parameters as defined in the following: (1) Commission authorizations (license and/or construction permit) and (2) applications on file with the Commission prior to release of this Order.¹⁴³ We will continue to process applications on file as of the date this Order is adopted. The Media Bureau may consider, on a case by case basis and consistent with the public interest, amendments to those applications to, for example, resolve interference with other stations or pending applications or resolve mutual exclusivity with other pending applications.
- Class A station displacement applications and applications for coverage changes that would serve any area that is not already served by that Class A station's authorized facilities.¹⁴⁴

69. Notwithstanding the freeze, licensees will not be prevented from filing modification applications when the application would help resolve international coordination issues or when a broadcast station seeks a new tower site due to the events of September 11, 2001. In addition, the Media Bureau will consider, on a case-by-case basis, requests for waiver of the freeze when the modification

(Continued from previous page)

service or cable carriage or other public interest issues that may arise in connection with analog/DTV channel swap proposals. *Second DTV Periodic NPRM*, 18 FCC Rcd at 1288, ¶28. Currently, two or more DTV licensees/permittees are allowed to request a swap of their DTV channel allotments by filing modification applications for each station. Few commenters address this issue on the record. Fewer state that they support channel swaps by application. See CEA Comments at 16; Thomas Smith Comments at 4. See also NYS-OFT Comments at 12-13; NPSTC Reply at 3-4 (supporting easing Taboo restrictions on early DTV/In-core analog swaps); MSTV/NAB Comments at 7; Paxson Reply at 10; Sinclair Comments at 8. For the reasons stated above, we have determined that we will freeze all NTSC/DTV channel swaps upon adoption of this Order. We therefore do not reach the issue of streamlining the NTSC/DTV channel swap process.

¹⁴² 47 C.F.R. §§ 73.622(c)(1), 73.623. Stations hoping to participate in negotiated channel election arrangements, discussed *supra*, must notify the Commission in the channel election form. If these arrangements are approved, the participants will be notified..

¹⁴³ We froze maximization applications for channels 52-59 on June 18, 2002. Public Notice, 17 FCC Rcd 11290 (2002). We froze maximization applications for channels 60-69 on January 24, 2003. Public Notice, 18 FCC Rcd 627 (2003).

¹⁴⁴ As an exception to this freeze, on-air Class A stations demonstrating that they face imminent disruption of service may request an STA to continue operations. Displacement applications filed by out-of-core LPTV stations that have been deemed Class A-eligible requesting a move to an in-core channel where Class A authority could be granted will not be acted on during this freeze, but for such stations, immediate non-Class A LPTV displacement relief may be requested through an STA.

application is necessary or otherwise in the public interest for technical or other reasons, such as when zoning restrictions preclude tower construction at a particular site or when unforeseen events, such as extreme weather events or other extraordinary circumstances, require relocation to a new tower site.

3. Border Interference Issues

70. A few commenters state that they have concerns with the Letter of Understanding governing modifications of the DTV Table of Allotments within 400 km of the U.S./Canadian border.¹⁴⁵ They submit that clarifications to the LOU process are essential to broadcasters' ability to plan their channel election and post transition business plans. For example, Red River and Paxson request that the Commission clarify that the LOU will not interfere with post-transition DTV replication of stations' current analog service area regardless of whether a station elects to provide permanent DTV service on its analog or digital channel. Red River also states that the LOU may function to prohibit some broadcasters from electing their NTSC – and specifically high VHF NTSC – channels for DTV use after the transition and requests that the Commission negotiate “channel election protections” for all U.S. station operations in the border zone.¹⁴⁶ CD&E, Red River, and Paxson also report that the LOU does not account for maximization applications on file with the Commission, and request that the Commission account for maximization applications in the LOU process.¹⁴⁷

71. There are approximately 43 stations with DTV applications awaiting international coordination.¹⁴⁸ We recognize that certain issues may remain to be completed in connection with the Canadian approval process for these stations. We will still require, however, broadcasters to make timely channel elections. As noted above, broadcasters with an out-of-core DTV channel and an in-core analog channel that is not available for digital use under the LOU should indicate this fact on their channel election form.¹⁴⁹ Like any one in-core licensee, these licensees may release their in-core channel and participate in the second round of elections; however, we will also afford licensees a later opportunity in the third round to elect another channel in the event their elected channel remains subject to, or was in the interim adversely affected by, international coordination.¹⁵⁰ Those broadcasters remaining on their DTV allotments that do not have applications to maximize should not have unusual difficulties in the approval process. With respect to post-transition DTV replication of stations' current analog service, we must coordinate DTV use of NTSC channels in border areas.¹⁵¹ We will resolve any remaining international coordination issues as part of the process of developing new DTV allotments.

¹⁴⁵ Red River Reply at 1, Paxson Comments at 24; Cohen Dippell and Everist (“CD&E”) Comments at 6.

¹⁴⁶ Red River Reply at 2.

¹⁴⁷ Red River Reply at 1, Paxson Comments at 24; CD&E Comments at 6.

¹⁴⁸ As of August 4, 2004, there are 32 pending DTV applications/rule making proposals requiring Canadian approval and 11 pending DTV applications/rule making proposals requiring Mexican approval. (These numbers do not reflect those applications which have failed the coordination process or which require further action by the applicant.)

¹⁴⁹ See section IV.A.1., *supra*.

¹⁵⁰ See section IV.A.1.f., *supra*.

¹⁵¹ We will conduct this coordination in the course of the new allotment rulemaking.

B. Replication and Maximization

72. In the creation of the DTV Table of Allotments, each DTV channel allotment was chosen to allow DTV service thereon to best match the Grade B service contour of the NTSC station with which it was paired.¹⁵² We took this approach to ensure that broadcasters have the ability to reach the audiences that they have been serving with the NTSC analog transmission system and that viewers continue to have access to the stations that they are accustomed to receiving over the air.¹⁵³ Although we have declined to make full signal replication mandatory,¹⁵⁴ we continue to believe that most DTV broadcasters eventually will replicate their NTSC coverage with DTV service. As an incentive to replicate, we stated that DTV licensees must either be on the air replicating their April 1997 NTSC Grade B service area as of the replication deadline or lose interference protection to the unreplicated portion of this service area outside the noise-limited signal contour.¹⁵⁵ We stated that other full or low-power stations would then have the opportunity to expand their service areas to serve the viewers made available as a result of a DTV station's failure to fully replicate.¹⁵⁶ We also stated in the *First DTV Periodic MO&O* that we would treat stations seeking to maximize their service areas in a similar manner.¹⁵⁷ We have emphasized DTV service maximization in the digital transition as a means by which stations may increase their DTV signal coverage and provide DTV service competitively within their respective markets.¹⁵⁸

73. In the *First DTV Periodic MO&O*, our goal in temporarily deferring the replication protection deadline established in the *First DTV Periodic Report and Order* was to permit stations to

¹⁵² *Sixth Report and Order*, 12 FCC at 14605, ¶ 29-30.

¹⁵³ *Id.*

¹⁵⁴ *See First DTV Periodic Report and Order*, 16 FCC Rcd at 5955, ¶ 21.

¹⁵⁵ *Id.* at 5956, ¶ 22.

¹⁵⁶ *Id.*

¹⁵⁷ *First DTV Periodic MO&O*, 16 FCC Rcd at 20606, ¶ 29-30. By maximizing, stations make power and antenna height increases above the values allotted in the DTV Table, and site changes that extend the service area of DTV facilities beyond the NTSC replication facilities. *Class A Order*, 15 FCC Rcd at 6377, ¶ 52. Congress has recognized the importance of preserving the right of DTV stations to maximize and has established specific measures to protect coverage areas defined in maximization applications. In the Community Broadcasters Protection Act of 1999, Congress protected applications for maximization against new Class A stations. To be entitled to protection by low power television stations applying for primary Class A status, DTV stations were required to have filed an application for maximization or a notice of intent to seek maximization by December 31, 1999, and to have filed a bona fide application for maximization by May 1, 2000. 47 U.S.C. § 336(f)(1)(D), (7)(A)(ii)(IV).

¹⁵⁸ *Sixth Report and Order*, 12 FCC Rcd at 14605, ¶ 30. The Media Bureau froze maximization applications in the 698-746 MHz band (channels 52-59 or the "Lower 700 MHz band") to assist participants in Auction No. 44 to determine the areas potentially available in the band for the provision of service by auction winners before the channels are cleared. *Public Notice*, 17 FCC Rcd 11,290 (2002). The Media Bureau later froze maximization applications in the 746-806 MHz spectrum band (channels 60-69 or the "Upper 700MHz band") to protect Guard Band and Public Safety entities from shifts or expansion in existing broadcast service, and to facilitate the eventual clearing of this spectrum and the auction of the commercial portions of the spectrum. *Public Notice*, 18 FCC Rcd 627 (2003).

elect a more gradual build-out of their DTV facilities, and thereby increase the number of stations capable of commencing digital service to at least their core communities by the May 2002 and May 2003 construction deadlines. We also gave DTV licensees seeking to maximize facilities, including analog UHF licensees, the same flexibility to implement graduated construction plans as analog VHF licensees.

74. We stated in the *First DTV Periodic MO&O* that we would establish in this second DTV periodic review a date by which broadcasters must either replicate their NTSC coverage or lose DTV service protection to the unreplicated areas, and by which broadcasters with authorizations for maximized digital facilities must either provide service to the associated coverage area or lose DTV service protection to the uncovered portions of those areas.¹⁵⁹ For DTV channels within the core spectrum, we proposed in the *NPRM* to set new replication and maximization protection dates: July 1, 2005, for affiliates of the top-four networks (i.e., ABC, CBS, Fox and NBC) in markets 1-100; and July 1, 2006, for all other commercial DTV licensees as well as noncommercial DTV licensees.¹⁶⁰ We sought comment on these dates, stating our goal to allow stations sufficient time to provide full replication and maximization service while also ensuring that stations continue to progress toward an all-digital broadcast service.¹⁶¹ We requested comment on whether we should adopt the same or different replication and maximization interference protection deadlines for stations operating in the 700 MHz band.¹⁶² We also sought comment on the disposition of construction permits or applications for replication or maximization pending after the deadline.¹⁶³

75. Some commenters argue that deadlines are unnecessary to further the transition and will be more harmful to broadcasters than beneficial to the transition.¹⁶⁴ MSTV/NAB and others request that we set the interference protection deadlines at the end of the transition for both in-core and out-of-core stations.¹⁶⁵ They reason that setting deadlines at the end of the transition will have no effect on the transition as the vast majority of transition-driving major-network-affiliated broadcasters in the largest markets and stations owned by large group owners are operating at full DTV facilities. They assert that requiring smaller market stations to fully replicate or maximize will only generate a small increase in

¹⁵⁹ *First DTV Periodic MO&O*, 16 FCC Rcd at 20606, ¶ 29.

¹⁶⁰ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1290, ¶ 33.

¹⁶¹ *Id.* at 1290, ¶ 32.

¹⁶² *Id.* at 1298, ¶ 53.

¹⁶³ *Id.*

¹⁶⁴ Some broadcasters assert that because they are reaching a significant proportion of their potential audience while under STAs, requiring full replication would be more expensive than useful. Belo states that to go to authorized power will cost it \$800,000 and increase its monthly electric expenses from \$350 to \$5,000. Belo Comments at 9-10. Cordillera provides its typical costs of construction of full power facilities at \$700,000 (\$400K for antenna/tower and \$300K for transmitter upgrades). Cordillera Comments at 6. Block Communications estimates its total cost of upgrading its current low-power facilities to increase the coverage of WFTE-DT and WDRB-DT to be between \$3 and \$3.5 million. Block Reply at 2.

¹⁶⁵ MSTV/NAB Comments at 8. *See also* Public Television Comments at 26 (supports a requirement for in-core only); Belo Comments at 10; CBC Comments at 12; Hubbard Comments at 4; Paxson Reply at 12; Sinclair Comments at 9-12. *See generally* NBC/Telemundo.

overall population served compared to the population currently receiving DTV service from the larger market stations.¹⁶⁶ In October 2003, MSTV submitted an analysis of digital broadcast power and coverage ("MSTV Power and Coverage Study"), reporting that approximately 60.4 percent of the stations operating pursuant to an STA are providing sufficient signal to reach 70 percent or more of their replication population., and that the overall reach of DTV signals should be sufficient to stimulate the marketplace for DTV broadcast receivers.¹⁶⁷

76. Others assert that firm replication and maximization dates are necessary to increase DTV service to the public and also to advance the clearing of spectrum in the Lower 700 MHz (channels 52-59) and Upper 700 MHz (channels 60-69) bands. For example, contrary to broadcasters' assertions that STA signals cover a sufficient percentage of their local population, Cavalier asserts that not all broadcasters operating at low power cover such high percentages of their populations.¹⁶⁸ CEA asserts that basic engineering demonstrates that under-powered signals cannot reach all the viewers in an analog service area.¹⁶⁹ Thomson declares that more than half of all broadcasters (*i.e.*, those that are operating under an STA) may be operating at such a low power that they are denying any digital signal to a substantial portion of their viewers.¹⁷⁰ Thomson offers anecdotal evidence of complaints of people in suburban areas without access to DTV signals, but seeks better reporting data from the Commission.¹⁷¹ Zenith states that reduced power transmission adversely affects consumer reception within the station's low power service area because strong NTSC signals cannot be rejected by DTV receivers if the ratio of desired digital to strong adjacent analog is too small.¹⁷² The American Cable Association ("ACA")

¹⁶⁶ MSTV/NAB Comments at 8; Tribune Reply at 3.

¹⁶⁷ See Letter from David Donovan, President, MSTV, to Marlene Dortch, Secretary, FCC, dated February 9, 2004, attaching Letter from David Donovan, President, MSTV, to Marlene Dortch, Secretary, FCC, dated October 30, 2003, and "Reaching the Audience: An analysis of Digital Broadcast Power and Coverage," Mark R. Fratrik, Ph.D., Vice President, BIA Financial Network, prepared for the Association of Maximum Service Television, Inc., dated October 17, 2003 (also finding, among other things, that the most popular stations have operational DTV facilities that serve most, if not all, of their replication areas). See also MSTV/NAB Comments at 11; CD&E reports that based on an initial inspection of the coverage achieved by STA operations specifying facilities that fulfill the community coverage requirement, STA facilities in many instances will serve a substantial portion of their respective NTSC service areas. CD&E Comments at 4. See also Block June 17, 2003 Letter at 2 (stating that WFTE-DT Salem and WDRB-DT Louisville reach 86 percent and 71 percent of their ATSC Grade B populations with STAs and that this is typical coverage of a DTV station operating under STA); Belo Comments at 9-10 (KENS-DT, San Antonio under STA, but serving 81 percent of population.); Cordillera Comments at 6 (showing KPAX-DT, Missoula at 91 percent coverage of analog Grade B).

¹⁶⁸ Cavalier Reply at 19.

¹⁶⁹ CEA Reply at 13-14. CEA offers an example of a station in Springfield, Illinois that, according to CEA, fails to serve a significant number of viewers within its existing analog service area. CEA Comments at Appendix A. See also CEA Reply at 5.

¹⁷⁰ Thomson, Inc. ("Thomson") Reply at 3.

¹⁷¹ *Id.*

¹⁷² Zenith Comments at 5. See also WPSX Reply at 5.

reports that the signals of DTV broadcasters at low power are not reaching cable systems' headends.¹⁷³ Because of this potential for poor user experience, Zenith asserts that it is critical that the Commission take whatever steps are necessary to ensure broadcasters build out their full facilities and increase their power expeditiously.¹⁷⁴

77. Some commenters seek deadlines much earlier than those we proposed in the *NPRM*. For example, CEA suggests July 1, 2004, for network affiliates in the top 100 markets and July 1, 2005, for all other broadcasters, including noncommercial.¹⁷⁵ CEA reasons that delaying full coverage beyond 2004/2005 will deprive consumers of access to multiple sources of over the air programming.¹⁷⁶ Motorola asserts that establishing deadlines for channel election and interference protection as early as possible will provide a stable core environment and thus aid non-core licensees to move into the core.¹⁷⁷

78. We take seriously our mandate to speed the transition and to ensure that the spectrum is used efficiently. At the same time, we have attempted to accomplish these objectives without imposing undue cost and delay on broadcasters. After careful consideration of the comments, we will adopt the following use-it-or-lose-it replication and maximization deadlines:

- **July 1, 2005** – Use-it-or-lose-it deadline for DTV licensees affiliated with the top-four networks (i.e., ABC, CBS, Fox and NBC) in markets 1-100. Those licensees that receive a tentative DTV channel designation in the channel election process on their current digital channel must construct full, authorized facilities. Those licensees that receive a tentative DTV channel designation on a channel that is not their current DTV channel must serve at least 100 percent of the number of viewers served by the 1997 facility on which their replication coverage was based.¹⁷⁸
- **July 1, 2006** – Use-it-or-lose-it deadline for all other commercial DTV licensees as well as noncommercial DTV licensees. Those licensees that receive a tentative DTV channel designation in the channel election process on their current digital channel must construct full, authorized DTV facilities. Those licensees that receive a tentative DTV channel designation on

¹⁷³ ACA Comments at 8. ACA reports that this problem is particularly acute in smaller and economically disadvantaged areas.

¹⁷⁴ Zenith Comments at 5. Concerns have also been raised by some rural groups, who cite insufficiently powered DTV transmissions as contributing to the potential disenfranchisement of rural communities from the early stages of the DTV transition. See Comments of Larry Mitchell, American Corn Growers Association; Paul Clark, National Association of Farmer Elected Committees.

¹⁷⁵ See CEA Comments at 17.

¹⁷⁶ CEA Reply at 10.

¹⁷⁷ Motorola Comments at 6.

¹⁷⁸ The number of viewers served by a station's 1997 facility on which its replication is based will be determined using population data from the year 2000 census. Thus, the population that will be reported as served by a station's 1997 facility on the table of station information that we plan to issue soon will generally be different (in most cases larger) than the population reported as served by that facility on Appendix B to the *Second MO&O on Recon. of the Fifth and Sixth R&Os*.

a channel that is not their current DTV channel must serve at least 80 percent of the number of viewers served by the 1997 facility on which their replication coverage was based.

79. We adopt these deadlines for the following reasons. First, we believe that the time has come to ensure that consumers have access to a full range of digital programming services from their local broadcast stations. We note that, even according to MSTV's own study, approximately 40 percent of stations operating pursuant to STAs are reaching less than 70 percent of their analog population with a digital signal.¹⁷⁹ The unserved households are more likely to be in outlying or rural areas, since the minimum STA coverage requirement is that a station's DTV signal covers its actual community of license.¹⁸⁰ Those consumers, like all consumers, reasonably expect that when they buy a digital television set they will be able to receive the same broadcast stations in digital that they receive in analog.

80. Second, our temporary deferral of the replication and maximization deadlines in 2001 recognized that, given the existing marketplace conditions, some broadcasters, particularly those in smaller markets, needed to take a more graduated build-out approach.¹⁸¹ In particular, we recognized the existing reality of modest DTV receiver penetration, which affected the financial decisions of broadcasters and those who fund them.¹⁸² The outlook for DTV receivers has changed dramatically since 2001. In August 2002, the Commission adopted a DTV tuner mandate.¹⁸³ Beginning on July 1, 2004, television receivers shipped in the U.S. must include digital broadcast tuners on a phased-in basis; by July 2007, all television receivers 13 inches and above must include a digital broadcast tuner.¹⁸⁴ In addition, in September 2003, the Commission adopted rules to permit the manufacture of cable-ready "plug-and-play" sets for one-way digital programming. By Commission mandate, each of these sets will also include an over-the-air digital tuner.¹⁸⁵ Between these mandates and the overall increasing pace of the DTV transition, we expect that the penetration of digital televisions with off-air reception capability will dramatically increase in the coming years.¹⁸⁶ Indeed, in testimony before Congress in June 2004, the Consumer Electronics Association ("CEA") forecast that more than 85 million American homes will

¹⁷⁹ MSTV Power and Coverage Study at 16.

¹⁸⁰ As ACA notes, this often can affect cable subscribers in these outlying or rural areas as well, since the cable systems in those areas may not be able to receive an adequate broadcast signal for carriage.

¹⁸¹ See *First DTV Periodic MO&O* at ¶ 25.

¹⁸² *Id.*

¹⁸³ See *DTV Tuner Order*, 17 FCC Rcd 15978 (mandating that television sets contain digital tuners on a phased-in basis, beginning in July 2004).

¹⁸⁴ See *fn. 26, supra*, describing DTV tuner phase-in schedule.

¹⁸⁵ See *Plug & Play Order*, 18 FCC Rcd at 20900-01, ¶ 34.

¹⁸⁶ See *Broadcast Flag Order*, 18 FCC Rcd at 23554, ¶ 8 ("We are reaching a critical juncture in the transition – the forthcoming availability of digital cable ready televisions with off-air reception capability will dramatically increase the number of consumers with access to DTV content and services"); *Plug and Play Order*, 18 FCC Rcd at 20900-01, ¶ 34.

have DTV tuners by 2010.¹⁸⁷ This emerging reality should alleviate the concerns of commenters stating that they do not wish to provide service in advance of widespread DTV set penetration.¹⁸⁸ Therefore, we do not believe it is appropriate to further postpone replication and maximization deadlines.¹⁸⁹

81. Third, we do not believe a replication/maximization deadline will impose an undue burden on broadcasters. Approximately 45 percent of broadcasters currently on the air have built licensed facilities and are operating at full power.¹⁹⁰ Many of these full-power stations are located in smaller markets and/or are non-commercial. Not only did they incur higher build-out costs than a station building today, but they have been incurring higher power costs to operate at full power. It would be inequitable to permit broadcasters operating at lower power – who have already accrued significant benefits from the Commission's STA policy – to continue to require the full-power broadcasters continue to shoulder a heavier load throughout the transition.

82. Fourth, we do not believe that the build-out deadlines will result in undue "stranded investment." As an initial matter, we are not requiring stations to replicate or maximize. The "use-it-or-lose-it" deadline simply means that after a reasonable build-out period has passed, if a station fails to provide a signal to serve certain viewers, another entity should have the opportunity to do so. After a reasonable build-out period, we believe that the objectives of providing service to the public and spectrum efficiency militate against further protection of the unserved areas. In addition, we have made a significant accommodation for those broadcasters moving to a new DTV channel at the end of the transition: the top-four network affiliates in the top 100 markets need only provide service to the same number of viewers as their replicated service area in order to preserve their right to maximize/replicate on their ultimate DTV channel; the remaining stations need only serve 80 percent of the number of viewers in their replicated service area to preserve their right to maximize/replicate on their ultimate DTV channel. If, as MSTV asserts, a significant amount of power (and hence, expense) is needed to "push" a UHF television signal out the last few miles beyond the station's "line of sight" or "radio horizon,"¹⁹¹ this should help address the concern. Moreover, we have made a special accommodation, described below, for many of the broadcasters for whom there would certainly be stranded investment –

¹⁸⁷ See Testimony of Gary J. Shapiro, President and CEO, Consumer Electronics Association, before the Committee on Energy and Commerce, Subcommittee on Telecommunications and the Internet, June 2, 2004, at 8.

¹⁸⁸ See Joint Commenters at 4; NBC/Telemundo Comments at 10; Hubbard Comments at 4; CD&E Comments at 2-3; MSTV/NAB Comments at 8; Tribune Reply at 3.

¹⁸⁹ We also disagree with Sinclair's assertion that the Commission should be focusing on the performance of over-the-air DTV receivers and not mandating that broadcasters increase transmitter power and coverage area. Sinclair Comments at 10; Sinclair Letter of June 13, 2002 at 1-2. In the *DTV Tuner Order* we adopted specific requirements to ensure that television sets be able to adequately receive DTV signals on all of the channels allocated to television service and continue to believe that competitive forces are generally the best approach for ensuring that DTV receivers perform adequately. See *DTV Tuner Order* 17 FCC Rcd at 15999, 16006, ¶¶ 46, 64. We encourage broadcasters to continue to work with consumer electronics manufacturers to improve the performance levels of DTV receivers and note progress in this regard. See *ATSC Approval of Recommended Practice A/74, establishing voluntary guidelines for DTV broadcast receiver performance*, announced June 22, 2004 (available at www.atsc.org).

¹⁹⁰ See Appendix D.

¹⁹¹ MSTV Power and Coverage Study at 4.

those with a DTV allotment outside of the core. We also note, according to Harris Corporation, that much of the investment in building out will not be stranded even if a station ultimately moves to another channel because some of the equipment can be re-used.¹⁹² Finally, for those broadcasters with an in-core DTV allotment that may want to consider moving elsewhere at the end of the transition, whatever additional costs there are can be factored into that decision just like the sunk costs of the initial STA facility. In any event, these broadcasters would be in no worse position than the hundreds of broadcasters that have already built out to full power and may face a similar choice.

83. Fifth, as with other aspects of the transition such as the initial construction deadlines, we recognize the particular needs of smaller market and non-commercial broadcasters by setting earlier deadlines for the larger market, commercial broadcasters expected to lead the transition.¹⁹³ In addition, we are adopting a waiver process for stations that truly cannot afford to build out to these minimum requirements, or that cannot build out for other reasons beyond their control.

84. Stations on any channel that have received construction permits with construction deadlines that extend beyond these replication/maximization interference protection dates must meet their replication/maximization requirements at the expiration date specified by their construction permit.¹⁹⁴ They must build facilities that meet the minimum requirements by that date or lose interference protection.

85. A station that fails to meet the above replication/maximization requirements will lose interference protection to the unused portion of the associated area as of the applicable interference protection deadline, as described more fully in section IV.D., *infra*.¹⁹⁵ In addition, a station failing to

¹⁹² See Letter from David R. Siddall to Marlene Dortch, Secretary, FCC, dated December 9, 2003, attaching charts estimating costs of a station operating with an STA on an out-of-core DTV allotment to relocate to an in-core channel. Depending on the station's power level and whether it ultimately moves to an in-core VHF or UHF channel, the "stranded" investment caused by an intermediate power increase on the existing DTV channel could range from \$345,000 for a higher power station (out of a total investment of \$1,355,000 to \$1,975,000) to \$505,000 for a lower power station (out of a total investment of \$1,145,000 to \$1,720,000). Harris has particular expertise in this regard as "the world's leading broadcast transmission equipment supplier," and the supplier of the majority of DTV transmitters and encoders in the United States. See Harris Comments at 1.

¹⁹³ See 47 C.F.R. § 73.624(d).

¹⁹⁴ In the *First DTV Periodic MO&O*, the Commission established a process whereby certain commercial stations and all noncommercial educational stations operating pursuant to a DTV STA would receive automatic DTV CP extensions until a future "use or lose" date. 16 FCC Rcd at 20608, ¶ 36. In the *Second DTV Periodic NPRM*, we sought comment on new replication and maximization protection dates and on the disposition of construction permits or applications for replication or maximization pending at the time of the deadline. In conjunction with the replication and maximization protection dates adopted herein, we clarify that we will also apply the DTV CP extension policy to all stations operating with a licensed DTV facility. Therefore, all properly authorized operating DTV stations with authorized CPs to make changes to their licensed facilities, including the network affiliate stations in the top 30 markets, will have their CPs extended until the replication/maximization interference protection deadlines established in this order. We believe this change is appropriate in order to provide consistency in the treatment of stations with outstanding CPs that have already received a DTV license and those with an outstanding CP operating pursuant to a DTV STA.

¹⁹⁵ As a practical matter, nearly every station that has fully replicated its analog coverage will have maximized its DTV coverage by reaching at least some small areas beyond the analog Grade B contour. Where a station has maximized its DTV coverage by a coverage shift that leaves some of its replication coverage area unserved, then (continued....)

meet the above deadlines will lose the ability to "carry over" its interference protection to its unserved DTV service area on its post-transition channel (e.g., on its in-core NTSC channel), as determined in the channel election process described above.¹⁹⁶ Thus, for example, if a station subject to the July 1, 2006 deadline builds out only to 60 percent of its replicated service population by that date, it will lose interference protection on its digital allotment beyond that 60 percent service area, and, if it seeks to move to its NTSC allotment at the end of the transition, it will not retain the ability to carry over interference protection beyond the 60 percent service area.

86. By contrast, a station that meets its applicable build-out requirements will retain interference protection to its authorized service area on its DTV channel if it remains on that channel, as well as the ability to "carry over" its interference protection for its authorized DTV service area if it moves to a different DTV channel post-transition.¹⁹⁷ However, a station moving to a different DTV channel at the end of the transition will lose interference protection during the transition to any unserved areas on its current DTV channel as of the applicable deadlines, notwithstanding the fact that it meets the minimum build-out requirements. For example, assume a broadcaster subject to the July 1, 2006 deadline will be changing DTV channels at the end of the transition and meets the 80 percent build-out requirement by serving 90 percent of its replicated service population by July 1, 2006. Assume further that it was authorized to build maximized facilities, serving 120 percent of its replicated service population. At the end of the transition, it will be entitled to "carry over" its full maximization service area, to the extent possible under our rules. However, during the transition, the station will lose interference protection on its existing DTV channel for those areas within its maximized service area that are unserved as of the deadline (i.e., those areas containing 90 percent-120 percent of its service population).

87. For those stations that are unable to provide the required service by our replication/maximization protection deadlines because of severe financial constraints or circumstances

(Continued from previous page)

the station's protection will shift to its maximized coverage area and it will lose interference protection to the unserved replication area.

¹⁹⁶ Analog service will remain protected throughout the transition, but DTV service to the former analog area will not be protected after the transition unless replication deadlines are met. Some stations may currently have licenses or construction permits to serve areas smaller than the service area allotted to them in the DTV table of allotments. Unless broadcasters in this situation construct facilities to serve these unserved areas within the DTV allotment prior to the replication/maximization interference protection deadline, they risk not being able to expand later to regain that service area.

¹⁹⁷ This decision modifies our decisions in the *Class A Order* and *Class A Recon*. *Class A Order*, 15 FCC Rcd at 6379-80, ¶ 58; *Class A Recon*, 16 FCC Rcd 8269-70, ¶ 67. In the *Class A Order*, in the context of relative interference protection priorities of Class A and DTV stations, we stated that "[t]o preserve their ability to maximize ... within the core, we will require stations ... to ... maximize their DTV service area on their ... DTV channel. These stations must have filed a notice of intent to maximize and must file an application to maximize within the deadlines mandated by the CBPA. [W]e will allow these stations to carry over to their in-core [NTSC] channel the maximized digital service area achieved on the [DTV] channel, to the extent that the [NTSC] channel facilities for maintaining the maximized service area provide required interference protection to other DTV stations." *Class A Order*, 15 FCC Rcd at 6379-80, ¶ 58. Under today's decision, stations need only meet our replication/maximization build-out deadlines to preserve their ability to maximize on their ultimate DTV channel. Similarly, stations electing to forfeit their current DTV channel and "flash-cut" to digital on their analog channel under the options described below for stations with out-of-core DTV allotments and satellite stations, will be entitled to interference protection as if they met the applicable replication/maximization build-out deadlines.

beyond a station's control, we will establish a limited waiver process and grant extensions of the applicable replication or maximization interference protection deadline on a six-month basis if good cause is shown. Broadcasters seeking a waiver on the basis of financial hardship must make a showing similar to that required to obtain a waiver of the DTV construction deadlines on financial hardship grounds.¹⁹⁸

1. Single Channel Broadcasters

88. KM Companies requests that we specifically address the treatment of single channel broadcasters with respect to the interference protection deadline.¹⁹⁹ As discussed elsewhere, single channel broadcasters will participate in the channel election process. Analysis of their channel elections will be based on their authorized facilities (construction permit for stations that have both a license and a construction permit). Whether their single-channel authority is analog or digital, a broadcaster that has not constructed or is not operating the appropriate facilities on which its election analysis is based will lose protection of the unserved area as of the applicable interference protection deadline (except in cases where the DTV allotment coverage is based on a construction permit that expires after the deadline, in which case they will keep their protection as long as the construction permit remains valid).

2. Early Surrender of DTV Out-of-core Channels ("Flash Cut")

89. The *Second DTV Periodic NPRM* asked if we should establish earlier replication and/or maximization interference protection deadline(s) for out-of-core broadcasters (i.e., in the 700 MHz band) than broadcasters operating on channels within the core in order to allow new services to be provided in portions of replication areas that a DTV licensee may never plan to serve in this spectrum.²⁰⁰ In response, a significant number of commenters urge us to prioritize band clearing in the 700 MHz band,²⁰¹ with many commenters — broadcasters and wireless operators alike — suggesting that DTV stations not be required to replicate or maximize in the 700 MHz band.

90. NYS-OFT argues that the Commission must take every reasonable step to ensure that public safety entities can use the Upper 700 MHz (channels 60-69) band during the remainder of the transition

¹⁹⁸ *Fifth Report and Order*, 12 FCC Rcd at 12841, ¶ 77; *First DTV Periodic MO&O* 16 FCC Rcd at 20611-12, ¶¶ 46-47. As with any request for waiver of our rules, a request for an extension of the applicable deadline will be granted only upon a showing of good cause and where grant of the extension will serve the public interest. See *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972) ("An applicant for waiver faces a high hurdle even at the starting gate.").

¹⁹⁹ KM Companies Comments at 3-4.

²⁰⁰ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1298, ¶ 53.

²⁰¹ See, e.g., Association of Public-Safety Communications Officials International, Inc. ("APSCO") Comments at 2-5; Public Safety Wireless Network Comments at 6-7; New York State Office for Technology ("NYS-OFT") Comments at 3, 7; Motorola Comments at 6; Crown Castle USA, Inc. Comments at 3-4; Joint Comments of KanOkla Telephone Association, Inc., Peoples Telephone Cooperative, Inc. and Artic Slope Telephone Association Cooperative ("KanOkla") at 3-4; Access Spectrum, LLC Comments at 7-11; DataCom Comments at 5-8; Flarion Technologies, Inc. ("Flarion") Comments at 3-4; Harbor Wireless, LLC, ("Harbor") Comments at 5; CEA Reply at 10.

period and requests that the Commission expedite clearing broadcast stations out of the entire band.²⁰² In order to allow for early access to the public safety spectrum, NYS-OFT proposes that the Commission pursue an aggressive deadline for service area replication with regard to out-of-core digital allotments, and those that choose not to meet the deadline should lose interference protection in areas not served.²⁰³

91. Many commenters emphasize the importance of the recovery of spectrum as an element of the digital transition.²⁰⁴ Harbor argues that efforts to develop wireless technologies in the Lower 700 MHz band (channels 52-59) will succeed only if there is a prompt, well-managed transition to DTV.²⁰⁵ Flarion and Harbor report that investment in 700 MHz equipment is sluggish due to the belief in the marketplace that broadcast use of the lower 700 MHz band will not be largely discontinued by 2006 - even in markets where interference from broadcasters is not a problem.²⁰⁶

92. Aloha states that the public interest would be served by the Commission clarifying that digital stations in the Lower 700 MHz band that are not now operational must be fully constructed (*i.e.*, full replication and maximization) on or before June 30, 2004, or abandoned. Aloha asserts that broadcasters not replicating their authorized service areas are in effect squatting on valuable spectrum, and are not serving their purpose of attracting viewers to DTV.²⁰⁷ Aloha suggests that if licensees choose to abandon their digital station they can be afforded an opportunity later to commence digital service by "flash-cutting" from their existing analog operation to digital.²⁰⁸ Aloha concludes that if broadcasters elect not to build, and instead abandon their out-of-core channel, it should clear some or all of the more than 100 existing and non-operational allocations from the Lower 700 MHz band. Aloha adds that if out-of-core broadcasters elect to build to fully serve their authorized service areas instead, the overall digital transition will be advanced.²⁰⁹

93. Broadcast stations assert that building replicated and maximized facilities out of the core is too costly. For example, Public Television argues that stations with out-of-core channels should not be

²⁰² Spectrum that New York State needs to operate its statewide wireless network in the Upper 700 MHz band is blocked by television stations in many of the most heavily populated areas of New York. NYS-OFT Comments at 2-3, 7, 26.

²⁰³ NYS-OFT Comments at 14. (noting that these stations should still be afforded full protection from interference on their final in-core allotment).

²⁰⁴ DataCom Comments at 2; KanOkla Comments at 4; Motorola Comments at 6; NYS-OFT Comments at 14; National Public Safety Telecommunications Council ("NPSTC") Reply at 4. Access Spectrum, LLC asks us to strictly enforce the deadlines that are established, given the lack of incentive for broadcasters to build out their DTV facilities in the 700 MHz band. Access Spectrum Comments at 8-10.

²⁰⁵ Harbor Comments at 2.

²⁰⁶ Flarion Comments at 2. Flarion cites 196 NTSC and 186 DTV stations in channels 52-69. *See also* Harbor Comments at 3.

²⁰⁷ Aloha Comments at 3-4.

²⁰⁸ Aloha Comments at 3.

²⁰⁹ Aloha Comments at 3-4.

required to replicate or maximize on the out-of-core channels, but should retain interference protection.²¹⁰

Public Television asserts that requiring out-of-core stations to replicate or maximize would waste public and private capital, given that these channels will be returned to the Commission at the end of the transition.²¹¹ WLNY states that if it is required to undertake a "double move" (i.e., construct a maximized DTV facility on its out-of-core channel and, after abandoning that facility, construct a new, second DTV facility on its eventual in-core channel), it will have incurred an unnecessary substantial expenditure, ranging from over \$730,000 to almost \$1,200,000 (depending on the exact in-core channel ultimately assigned to WLNY).²¹² WLNY states that this waste of money and resources can be avoided only by eliminating any requirement for the construction of an out-of-core maximized DTV facility, thereby leaving WLNY free to go directly from its out-of-core low power DTV operation to its permanent in-core DTV operation at the end of the transition period.

94. As noted above, Harris reports that a station with a DTV out-of-core channel will have higher costs if it is required to replicate or maximize on the out-of-core channel before moving to its eventual in-core channel. Harris estimates that a station assigned to out-of-core channel 57 would spend \$515,000 to build and broadcast in digital at reduced power pursuant to an STA.²¹³ If the station operates at full power on channel 57, Harris estimates costs of an additional \$505,000. If the station later moves to an in-core VHF channel (2-13), it would cost another \$630,000, for a total of \$1.65 million. In contrast, if the station remained at STA power on channel 57, and went to full power only upon moving to its in core VHF channel, its total cost would be \$1.145 million, which is a saving of \$505,000.²¹⁴ Dielectric Communications reports similar expense to build in full power out-of-core, much of which would be lost when the station moves to its eventual in-core allotment.²¹⁵

95. The Commission permits broadcasters with NTSC stations in the Upper 700 MHz (60-69)²¹⁶

²¹⁰ Public Television at 27.

²¹¹ Public Television at 27. MSTV/NAB asserts that pushing deadlines off to the end of the transition for all stations will mitigate stranded investment in maximized facilities, especially for stations with out-of-core assignments. MSTV/NAB Comments at 9. See also Hubbard Comments at 4.

²¹² See, e.g. WLNY Comments at 16.

²¹³ Harris Dec. 9, 2003 Letter and Attachment. Harris specifies a 1.8 kW STA.

²¹⁴ Harris also reports a \$505,000 cost savings in avoiding an out-of-core power increase before moving to an in-core channel between 14 and 51.

²¹⁵ Dielectric Nov. 20, 2003 Letter and Attachment (\$1.1 to \$1.25 million to build a maximized digital transmitter for a UHF station and roughly \$390,000 to move to another channel, attributable to costs of new antenna and transmitter and for re-installation.)

²¹⁶ See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, ("Upper 700 MHz First Report and Order"), 15 FCC Rcd 476 (2000); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, 15 FCC Rcd 20845 at 20870-71 ¶ 61 (2000); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *Third Report and Order*, 16 FCC Rcd 2703, 2718, ¶ 36 (2001); on recon. Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, 16 FCC Rcd 21633 (2001).

or the Lower 700 MHz (52-59)²¹⁷ to enter into voluntary band clearing arrangements consistent with the Commission's existing band-clearing rules and Section 6 of the Auction Reform Act of 2002.²¹⁸ In furtherance of the significant public interest in rapid band clearing, and in recognition of the fact that all out-of-core DTV facilities will have to move at the end of the transition, we will permit stations with an in-core NTSC channel paired with an out-of-core DTV channel, as well as stations with two out-of-core channels, to surrender their out-of-core DTV channels and operate in analog on their analog channels. We will also permit single-channel DTV stations out of the core, upon Commission approval, to elect not to construct DTV facilities and instead to give up their assigned DTV channel in the 700 MHz band in return for a DTV channel inside the core.²¹⁹ Stations have up to their initial channel election deadline to inform the Commission that they will use this option. We delegate the authority to grant these requests to the Media Bureau. Upon approval from the Commission, these stations will then surrender their out-of-core digital channel and be treated as single channel stations, allowed to "flash cut" to digital on their in-core channel no later than the end of the transition in the stations' markets.²²⁰ Because of the greater potential for wasted expenditures in DTV facilities built in the 700 MHz band (since there will not be an opportunity to remain in that band after the transition), and given the potential for earlier use of this spectrum by public safety and other 700 MHz licensees, we will presume that granting such a request will be in the public interest if the station demonstrates that it is assigned a DTV channel out of the core and that grant of the request would not result in the loss of a DTV channel affiliated with one of the four largest national television networks (ABC, CBS, NBC, or Fox). We have consistently relied on affiliates of the four largest national television networks to achieve the necessary milestones throughout the DTV transition.²²¹ We conclude that the presumption we establish is consistent with Congress' objectives for this spectrum, should generally increase the attractiveness of the spectrum to potential 700 MHz licensees, and will not unduly delay the expeditious transition to DTV.

²¹⁷ See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), 17 FCC Rcd 1022, 1094 n.537 and 1095, ¶ 184 (2002).

²¹⁸ Auction Reform Act of 2002, Pub. L. No. 107-195, 116 Stat. 715 ("Auction Reform Act") § 6(a), 47 U.S.C. § 337 note. Section 6 of the Auction Reform Act restricts the Commission from waiving certain broadcast interference standards and the minimum spacing requirements for certain proposals to relocate Channel 52-69 analog operations to a Channel 2-51 DTV allotment, if such waiver "will result in any degradation in or loss of service, or an increased level of interference to any television household except as the Commission's rules would otherwise expressly permit, exclusive of any waivers previously granted." *Id.* These restrictions do not, however, apply to proposals to move Channel 63, 64, 68, or 69 analog operations to in-core DTV allotments "in order to make such frequencies available for public safety purposes." *Id.*, Section 6(b).

²¹⁹ We will assign these broadcasters an in-core DTV channel when we generate a revised DTV Table of Allotments. See also discussion *supra* section IV. A. 1.

²²⁰ As noted above, these stations will retain their ability to replicate and/or maximize on their NTSC allotment as if they met the applicable replication/maximization build-out requirement. The station will then be responsible for meeting any DTV service obligations, (e.g. hours of operation, and replication/maximization requirements) applicable to other like broadcasters on the date it commences DTV operations.

²²¹ See *Fifth Report and Order*, 12 FCC Rcd at 12842, ¶ 78. These stations also must remain on the air in order to fulfill Congress' directive that stations "licensed to or affiliated with one of the four largest national television networks" must be "broadcasting a digital television service signal" in order for the transition to occur. See 47 U.S.C. § 309 (j)(14)(B)(i).

96. This presumption, however, is neither conclusive nor dispositive. We will also consider whether special circumstances raised by the resulting loss of digital broadcast service would be sufficient to rebut the presumption.²²² Also, for requests that do not meet the presumption, we would consider all the relevant public interest factors regarding opportunities for provision of wireless and public safety services, acceleration of the DTV transition, and the loss of broadcast service in deciding whether or not to approve the request.

97. Stations that have been denied an extension of the construction requirements and admonished because they failed to demonstrate that they are meeting the necessary criteria for an extension and have not come into compliance are not eligible to surrender their out-of-core DTV channel.²²³

C. Satellite Stations

98. In the *Second DTV Periodic NPRM* we sought comment on whether the public interest would be served by allowing television satellite stations to turn in their digital authorization and "flash-cut" to DTV transmission at the end of the transition period.²²⁴ TV satellite stations are full power terrestrial broadcast stations authorized under Part 73 of the Commission's rules to retransmit all or part of the programming of a parent station that is typically commonly owned. Eligible satellite stations were assigned a paired DTV channel in the current DTV Table of Allotments. The Commission first authorized TV satellite operations in small or sparsely populated areas, which were deemed to have economic bases insufficient to support stand-alone, full-service operations.²²⁵ The Commission later authorized satellite stations in larger markets when the applicant demonstrated that the proposed satellite could not operate as a stand-alone, full-service station.²²⁶ The Commission has also allowed a full-

²²² We find that the surrender of DTV channels of these out-of-core stations will generally not create a loss of particular programming to viewers during the transition because, as presented in Paxson's comments, the stations will continue analog operations until switching to DTV by the end of the transition. See Paxson Comments at 30-31.

²²³ On April 16, 2003, the Commission released an Order establishing remedial measures to be followed when a television station fails to meet its DTV construction deadline and fails to adequately justify an extension of its DTV construction deadline. Under the three-step graduated sanction process we will first deny the request for an unqualified extension and admonish the station for its failure to comply with its DTV construction obligation. The station will then have six months to complete its construction, subject to reporting requirements and possible additional sanctions in the interim. Under the second step, if the station has not come into compliance with the DTV construction requirement within the six-month period, then, absent extraordinary and compelling circumstances, we will issue a Notice of Apparent Liability for forfeiture to the licensee and require that the station report every 30 days on its proposed construction milestones and its efforts to meet those milestones. Under the third and final step, if the station has continued to fail in its efforts to come into compliance with the DTV construction requirement within the second six-month period of time (i.e., one year from the date of the formal admonition), then, absent extraordinary and compelling circumstances, we will consider its construction permit for its DTV facilities to have expired and we will take whatever steps necessary to rescind the station's DTV authorization. *Remedial Measures For Failure to Comply With Digital Television Construction Schedule*, 18 FCC Rcd 7174 (2003) ("Remedial R&O").

²²⁴ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1326, ¶ 127.

²²⁵ See, e.g., *Authorization of UHF Stations*, 43 FCC 2734 (1954).

service station to convert to satellite operation upon a showing that the community no longer has a sufficient economic base to support a full-service operation.²²⁷

99. On October 16, 2003, the Commission deferred the digital construction deadlines for 30 satellite stations that had requested a third extension of time to construct.²²⁸ The Commission noted that the issue of whether to permit satellites to turn in their digital authorization and "flash cut" to DTV transmission at the end of the transition period is under consideration in this proceeding.

100. All of the commenters that addressed this issue agreed that satellite stations should be given special treatment in the transition to digital operations.²²⁹ These commenters generally argue that most satellite stations operate in small or sparsely populated areas that have an insufficient economic base to support full-service operations. This economic reality makes it prohibitively expensive for most satellite stations to construct separate digital facilities and to operate analog and digital stations concurrently. Indeed, two satellite station owners commented that, if satellite stations were required to build and operate separate digital facilities during the transition, they might be forced to turn in their satellite station licenses and let the stations go dark.²³⁰

101. MSTV/NAB supports the Commission's proposal to permit satellite stations to turn in their digital authorizations and "flash cut" to DTV transmissions on their analog channel at the end of the transition period.²³¹ MSTV/NAB argues that, to ensure clarity and certainty in the channel election process, the Commission should require satellite stations to make a decision whether to flash-cut prior to the channel election deadline. MSTV/NAB also argues that those satellite stations that already have built out their digital facilities should be granted flexibility in other ways, such as being permitted to operate their DTV facilities at a reduced schedule until the end of the transition.²³² Media General proposes that satellite stations be permitted to surrender one of their paired channels now provided that they construct fully operational DTV facilities on their retained channel that replicate the station's current analog service area by or before the end of the DTV transition period in the satellite station's market.²³³ LeSEA argues that satellite stations should have the option to turn in either their analog or digital authorization, at the licensee's discretion, at the end of the transition.²³⁴ LeSEA argues that because most satellite

(Continued from previous page)

²²⁶ *Suburban Broadcasting Corp.*, 83 F.C.C.2d 359, 365-66 (1980).

²²⁷ *See, e.g., Central Minnesota Television, Inc.*, 2 FCC Rcd 6730 (1987); *Television Satellite Stations*, 6 FCC Rcd 4212, 4213-14 (1991) (subsequent citations omitted).

²²⁸ *See, Order, DTV Build-Out, Requests for Extension of the Digital Television Construction Deadline, Commercial Television Stations With May 1, 2002 Deadline*, 18 FCC Rcd. 22705 (2003).

²²⁹ *See Comments of MSTV/NAB at 18-19; Thomas C. Smith at 5-6; LeSEA Broadcasting Corporation ("LeSEA") at 4; Media General Communications, Inc. ("Media General") at 1.*

²³⁰ *See Comments of LeSEA at 4; Media General at 6.*

²³¹ *See MSTV/NAB Comments at 18; MSTV/NAB Reply at 16.*

²³² *See MSTV/NAB Comments at 18-19; MSTV/NAB Reply at 17.*

²³³ *See Media General Comments at 10-11.*

²³⁴ *See LeSEA Comments at 4-5.*

stations operate in geographically isolated regions, the retention of digital authorizations during the transition would not pose significant spectrum inefficiency issues. Alternatively, LeSEA proposes that satellite stations should be permitted to flash-cut to digital operations now on either their analog or digital channel, and turn in the unused channel authorization. According to LeSEA, the flash-cut now option would be workable only if satellite stations were guaranteed cable carriage for the digital signal.²³⁵

102. To ensure that the channel election process described herein proceeds smoothly and that the channels being surrendered by satellite licensees are included, we will require all satellite stations to participate in the channel election process. We will permit satellite stations to surrender one of their paired channels (the one not elected on their channel-election form for use after the transition) and flash cut from analog to digital transmission by the end of the transition period. Satellite stations that choose to flash cut must make the flash cut decision and notify the Commission by their initial channel election deadline. Satellite stations choosing the flash cut option will be required to surrender one of their two broadcast channels. Except as provided below (for stations with out-of-core analog and in-core DTV channels), satellite stations that choose not to flash cut and instead choose to retain both an analog and a digital channel during the transition period must comply with the applicable digital construction deadlines, including any extension granted by the Commission. As noted above, a satellite station that surrenders one of its channels under the "flash-cut" option will be treated as if it met the applicable replication/maximization build-out requirements.

103. Satellite stations with an analog channel outside the core and that are electing their current in-core DTV channels for post-transition DTV service will not be required to surrender a channel at this time. To do so would require these stations to give up their DTV channels unnecessarily or to build DTV facilities now, unlike other satellite stations which, under the flash cut policy announced herein, may elect to wait to build their digital facilities until closer to the end of the transition period. In this instance, we believe the benefits of this approach outweigh our interest in rapid clearing of the out-of-core television spectrum. Satellite stations with an out-of-core analog channel and an in-core digital channel may retain their out-of-core channel for continued analog service until the end of the transition or until they decide to build and transmit only in digital, whichever is earlier.

104. Stations electing to return their DTV channel to the Commission will retain interference protection to the areas defined in existing DTV replication or maximization applications on file with the Commission until the end of the transition when the station must commence digital transmissions. This interference protection will apply to the digital service area of the channel on which the station flash cuts to digital to the extent that the station replicates and maximizes at the time of the flash cut and to the extent consistent with our DTV interference protection rules. To ensure that satellite stations that have already constructed digital facilities or that do so before the end of the transition are not disadvantaged, we will also permit these stations to retain replication and maximization interference protection for their digital stations until the end of the transition in their market. Similarly, to provide satellite stations that have constructed digital facilities additional flexibility during the transition while maintaining an basic level of service to the public, we will also permit satellite stations that choose to construct separate digital facilities to operate only during prime time hours (at a minimum) until the end of the transition.²³⁶

105. We believe that this approach will best ensure that satellite stations complete the

²³⁵ *Id.* at 8.

²³⁶ "Prime time" is defined in 47 C.F.R. § 79.3(a)(6).

conversion to digital format and continue to provide broadcast programming to viewers in their communities. We agree with LeSEA, Media General, and MSTV/NAB that many satellite stations may not be financially capable of operating both an analog and a digital facility concurrently. As these commenters point out, satellite stations provide programming to communities that cannot support operation of these stations on a full-service basis. Indeed, Media General and LeSEA state that their satellite stations continually operate at a loss and that, absent some relief from the requirement of constructing and operating dual facilities during the transition, they may be forced to turn in their satellite licenses and cease all operations. Unlike full-service stations, satellite stations have chosen to forego or relinquish full-service status and instead retransmit the programming of a parent station because full-service operation of the satellite facility is not economically viable. We believe that the unique status of and circumstances faced by satellite stations warrant special treatment of these stations during the transition.

106. We do not believe that granting this special relief to satellite stations will unduly hinder the overall transition to digital television. Some of the affected viewers may have access to other digital signals. According to a study of its satellite stations, Media General states that many households receiving an off-air signal from a satellite station have access to at least one off-air DTV signal of a distant full-power TV station broadcast from a larger city.²³⁷ Moreover, the alternative to the flash-cut option we are adopting today, that of requiring satellites to operate dual facilities during the transition, could result in the cessation of all service, either analog or digital, by some satellite stations. The approach we adopt today will ensure that satellite stations provide digital service by the end of the transition and will help preserve television service in the historically underserved communities in which most satellite stations operate.

D. Disposal of Construction Permits and Applications for Replication/Maximization

107. In the *NPRM*, we asked for comment on how the Commission should dispose of a station's construction permit or application for replication or maximization facilities if the station fails to construct and operate facilities that fully replicate its NTSC service or provide signal coverage over an authorized maximized service area by the interference protection deadlines established in this proceeding.²³⁸ We stated that our inclination was to restrict any station that has failed to fully replicate or construct its authorized maximization facilities by the applicable deadline from filing an application to expand coverage for a certain period of time in order to allow other existing or new stations, including Class A eligible LPTV stations on out-of-core channels, to apply to use this spectrum.²³⁹

108. WDLP suggests that when a broadcaster is not providing full signal coverage after the deadlines, LPTV and other licensees should be permitted to file displacement applications (as minor changes).²⁴⁰ The Community Broadcasters Association ("CBA"), representing the nation's low power

²³⁷ See Media General Comments at 8. Media General states that it commissioned a technical study in the markets served by its five satellite stations in 2001. According to Media General, this study demonstrates that the majority of the service areas for these satellite stations received at least one other DTV service. *Id.*, n. 18.

²³⁸ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1290-91, ¶ 35.

²³⁹ *Id.* at 1290-91, ¶ 35.

²⁴⁰ WDLP Comments at 4.

and Class A television stations, supports rules whereby once a station fails to replicate or maximize its services, that station is prevented from filing a new application to expand its facilities to recapture that "lost" spectrum.²⁴¹ CBA supports modifying the construction permits and facilities of digital licensees failing to meet the Commission's proposed deadlines.²⁴² It asserts that making such modifications will enable other broadcasters to take advantage of the unused facilities and spectrum.

109. We will dismiss any applications and cancel any construction permits for facilities in excess of those in actual operation by a station as of the applicable interference-protection date. We will require broadcasters to file applications for licenses to cover their actual facilities served as of the interference protection deadline. We have given broadcasters ample opportunities over the past years to expand their service areas, and advance warning that if they elect not to provide their viewers with DTV the Commission may ensure the area is served in other ways.²⁴³ Therefore, we will permit existing DTV stations seeking to expand their coverage area and Class A eligible stations on out-of-core channels to apply for unused spectrum within the core.²⁴⁴ We will describe the procedures for filling in those unserved areas in a future Public Notice or as part of the periodic review process. Broadcasters failing to meet our replication or maximization deadlines will be permitted to reapply for authorization to provide service to those areas, but their applications will be subject to conflicting applications. This will allow other existing stations, including Class A eligible LPTV stations on out-of-core channels, the opportunity to apply to use this spectrum. The process for resolving conflicting applications will be announced in another Public Notice or proceeding.

E. Pending DTV Construction Permit Applications

110. Approximately 65 commercial and noncommercial television licensees have not yet been granted an initial DTV CP. Almost all of these licensees have filed an application for a digital CP, but grant of these applications has been delayed for a variety of reasons, including delays in international coordination with Canada and Mexico and unresolved interference issues. To date, these applicants have not been required to construct DTV facilities pending action on their outstanding DTV applications. To ensure that all licensees that have been allotted digital spectrum begin to provide digital service, we proposed in the *Second DTV Periodic NPRM* to require that all television licensees that have filed an application for a digital CP with the Commission that has not yet been granted commence digital service pursuant to special temporary authority ("STA") within one year from adoption of the Report and Order in this proceeding.

111. It is crucial at this stage of the transition that all licensees with DTV CP applications that have not yet been granted begin to construct digital facilities. We will therefore adopt a proposal similar to that advanced in the *NPRM*. Rather than requiring licensees with pending DTV CP applications to construct at least the minimum initial facilities required to serve their communities of license within a year from the adoption of this Report and Order, as we proposed, we will instead require such licensees, within the same time frame, to construct and operate "checklist" facilities that conform with the

²⁴¹ CBA Comments at 2.

²⁴² *Id.*

²⁴³ See *First DTV Periodic Report and Order*, 16 FCC Rcd at 5956, ¶ 22.

²⁴⁴ LPTV stations may also apply for secondary operation on unused spectrum.

parameters of the DTV Table of Allotments and other key processing requirements.²⁴⁵ This approach best advances our goal of ensuring continued progress in the transition by requiring that all licensees begin to provide DTV service. "Checklist" applications are routinely processed by the Commission staff within three days of filing, and most do not require international coordination. Thus, this procedure is the most expeditious means of awarding DTV construction permits to those licensees who do not yet have them.

112. As MSTV/NAB points out,²⁴⁶ many licensees with pending DTV CP applications are facing delays beyond their control. Some are awaiting international coordination of pending applications or resolution of interference issues. Other licensees have applied for new DTV allotments either to replace an initial out-of-core allotment with one in the core or to otherwise improve their potential DTV service. Although the Commission will continue to work with applicants to resolve outstanding issues and to process pending applications for digital facilities as expeditiously as possible, we nonetheless agree with those commenters who argue that it is critical at this stage in the transition that all licensees begin working toward construction of DTV facilities.²⁴⁷

113. We will allow licensees with pending DTV CP applications that file checklist applications to continue to pursue their non-checklist applications now on file. Thus, while these applicants will receive a construction permit for a checklist facility and will be required to construct such facilities within one year from adoption of the Report and Order in this proceeding, we will permit these applicants to continue to attempt to resolve the issues delaying approval of their non-checklist application currently on file with the Commission. If the non-checklist application is approved before construction of the checklist facility is complete, the permittee may request that the Commission substitute the non-checklist CP for the checklist CP. The Commission will consider requests for waiver of the one year construction deadline, on a case-by-case basis, using the criteria for extension of DTV construction deadlines.²⁴⁸ Grounds for an extension must relate to the checklist facility, not the pending non-checklist application.

F. Intermediate Signal Level

114. In the *First DTV Periodic MO&O*, we allowed stations to commence digital operations by constructing and operating facilities that at least provide the required level of digital signal strength to

²⁴⁵ See 47 C.F.R. § 73.622(f)(2); Public Notice, "Commission Details Application Filing Procedures for Digital Television," (rel. Oct. 16, 1997). "Checklist" facilities have power and antenna height equal to or less than those specified in the DTV Table of Allotments and are located within a specified minimum distance from the reference coordinates specified in the DTV Table of Allotments. Because these facilities comply with the interference requirements specified in the rules, no further consideration of interference is required. In addition, because the DTV Table has been coordinated with Canada and Mexico, "checklist" facilities generally do not require further international coordination.

²⁴⁶ See MSTV/NAB Comments at 13; MSTV/NAB Reply at 14.

²⁴⁷ See CEA Comments at 18 (contending that unresolved CP issues, such as requests for higher power and larger service areas that cannot be reconciled with applications for other stations or coordinated with neighboring countries, should not be used as an excuse to do nothing).

²⁴⁸ *Fifth Report and Order*, 12 FCC Rcd at 12841-42, ¶ 77; *Second DTV Periodic NPRM*, 18 FCC Rcd at 1301-1302, ¶¶ 63-64; 47 C.F.R. § 0.459.

their communities of license.²⁴⁹ We predicted that the "requirement that broadcasters serve their community of license will ensure that, for most stations, the majority of their analog service populations will receive initial digital service."²⁵⁰ We also decided to retain our enhanced principal community signal strength standard, which requires a 7dB increase in community of license coverage that must be met by December 31, 2004, for commercial stations and December 31, 2005, for noncommercial stations.²⁵¹ The purpose of our revised requirement was to improve the availability and reliability of DTV service in the community of license and provide an extra measure of protection from interference to DTV service in the community. The *NPRM* asked if significant numbers of consumers are not being served by stations operating under low-power STAs, and, if so, what actions the Commission should take.²⁵² We asked whether we should establish a deadline by which stations must provide DTV service within the entire area of their analog "city-grade" coverage contour or their Grade A coverage. We also asked whether the 7dB increase in community of license coverage will likely ensure that the majority of viewers are served without an additional coverage requirement.

115. We conclude that we will not impose an intermediate signal level requirement. Several commenters opposed an intermediate requirement²⁵³ and broadcasters supported it only if coupled with delaying the replication and maximization deadlines until the end of the transition.²⁵⁴ We did not receive hard evidence of broadcasters operating at such low levels that they are not covering their communities of license.²⁵⁵ With the community of license signal strength increases set for 2004 and 2005, we expect that more of broadcasters' service areas will be covered as these dates approach.²⁵⁶ Nonetheless, given the anecdotal evidence of dissatisfied viewers unable to receive signals,²⁵⁷ we will closely monitor reports from consumers and other parties regarding broadcasters operating at insufficiently low power levels and will act on these reports should a pattern of abuse of our signal level requirements become

²⁴⁹ *First DTV Periodic MO&O*, 16 FCC Rcd at 20607, ¶ 25.

²⁵⁰ *Id.*

²⁵¹ *First DTV Periodic MO&O*, 16 FCC Rcd at 20607, ¶ 25. In the *First DTV Periodic Report and Order*, we imposed a principal community coverage requirement that is stronger than the DTV service contour requirement that we adopted as an initial obligation in the *Fifth Report and Order*, 16 FCC Rcd at ¶ 27.

²⁵² *Second DTV Periodic NPRM*, 18 FCC Rcd at 1291, ¶ 36.

²⁵³ See CEA Comments at 17; Public Television Comments at 27-28; CBC Comments at 12.

²⁵⁴ See, e.g., Belo Comments at 10; MSTV/NAB Comments at 8.

²⁵⁵ Harris hypothesized that broadcasters are not providing adequate signal coverage and proposed July 1, 2004 for broadcasters to assure Grade A coverage, but it did not provide data. Harris Reply at 2.

²⁵⁶ Increasing power is one way of increasing the signal strength within an area, such as the community of license. A 7 dB increase in a station's power will result in a 7 dB increase in signal strength. A power increase will also increase the station's service area. Increasing antenna height is another way to increase a station's signal strength and service area.

²⁵⁷ See, e.g., Reply of the Consumer Federation of America at 3-4 ("CFA Reply"); American Corn Growers Association Comments; National Association of Farmer Elected Committees Comments; CEA Comments at 7-10, 16-17; Thomson Comments at 5-8; Comments of the National Cable & Telecommunications Association ("NCTA") at 7-8; ACA Comments at 7-9.

evident.²⁵⁸ We may also, on our own initiative, conduct signal strength tests to ensure that broadcasters are operating at power levels that are consistent with the Commission's requirements.

G. Interference Protection of Analog and Digital Television Service in TV Channels 51-69

1. Definition of "Actual" Parameters

116. The *Second DTV Periodic NPRM* sought comment on an issue raised in the *Public Safety Spectrum Report and Order*.²⁵⁹ The *NPRM* explained that sections 90.545(c) and 27.60(b) of the Commission's rules describe alternative methods for a wireless applicant or licensee in the 700 MHz band to move closer to an analog TV or DTV antenna while still complying with the interference protection requirements in the rules.²⁶⁰ Pursuant to one of these alternatives, the applicant or licensee may submit an engineering study that considers the "actual," rather than "hypothetical," parameters of the analog TV or DTV station and that demonstrates that the station's actual coverage area is smaller than its hypothetical operating parameters - because the station is operating, for example, with lower power than that presumed in the hypothetical parameters or because intervening terrain or other factors reduce the station's coverage area - thereby permitting land mobile stations and these broadcast facilities to be more closely spaced.²⁶¹ The *Public Safety Order* allowed applicants to submit engineering studies showing how they propose to meet the appropriate desired to undesired ("D/U") signal strength ratio at the existing TV station's "authorized or applied for" Grade B service contour or equivalent contour for DTV stations instead of providing the protection built into the distance spacing table, which is based on a standard TV station's hypothetical Grade B contour.²⁶² In the *Second DTV Periodic NPRM*, we tentatively concluded that Sections 90.545(c)(1)(ii) and 27.60(b)(1)(iii) of our rules should be amended to make clear that the interference protection specified in those provisions should be afforded to authorized and/or applied for NTSC and DTV facilities, including the facilities specified on the broadcast station's license or construction permit or both when a station has both a license and a construction permit. We sought comment on this tentative conclusion, as well as alternatives.

117. As proposed, we will amend sections 90.545(c)(1)(ii) and 27.60(b)(1)(iii) to make clear that the interference protection specified in those provisions will be afforded to authorized and/or applied for NTSC and DTV facilities, including the facilities specified on the broadcast station's license or

²⁵⁸ Thomson agrees and urges near-term Grade A coverage requirement if data confirms persistence of coverage problems. Thomson Comments at 8.

²⁵⁹ See *Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communications Requirements Through the Year 2010*, 14 FCC Rcd 152, 224 ¶ 158 (1998) ("*Public Safety Spectrum Report and Order*").

²⁶⁰ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1297, ¶ 50.

²⁶¹ Reference to the Grade B contour of a "hypothetical" station permits an applicant or licensee to determine if there is any need to submit additional engineering studies or if there is not even a hypothetical station within the relevant area. If there is a hypothetical station, then the applicant or licensee must demonstrate how it would protect the actual (including authorized or applied for) parameters.

²⁶² *Public Safety Spectrum Report and Order*, 14 FCC Rcd at 224, ¶ 158.

construction permit or both when a station has both a license and a construction permit.²⁶³ While some public safety and other entities in the 700 MHz band assert that protecting authorized and/or applied for NTSC and DTV facilities is unnecessary, this protection is necessary to permit broadcasters to increase their service to reach their replication and maximization levels without risk of interference from new services. Permitting stations to achieve replication and maximization coverage serves the transition to DTV by increasing the population with access to digital signals. In addition, as discussed in section IV.B., *supra*, replication on out-of-core DTV channels is necessary to preserve broadcasters' opportunity to carry over their DTV service areas to their eventual in-core channels.²⁶⁴ As asserted by Sinclair, protecting less than the full replicated or maximized facilities could create loss of service to wireless or public safety providers when DTV stations increase to replicated or maximized facilities.²⁶⁵ Our existing band-clearing policies and newly introduced "flash cut" policy discussed in section IV.B.2, *supra*, should alleviate some of the 700 MHz entities' concerns by more rapidly freeing up additional spectrum in channels 52-69. New operations in the 700 MHz band will essentially need to provide the interference protection specified in sections 90.545(c)(1)(ii) and 27.60(b)(1)(iii) for authorized or applied for but un-built facilities only until the July 1, 2005, and July 1, 2006, replication/maximization interference protection dates.²⁶⁶ As discussed above, if a broadcaster is not serving its fully authorized replication or maximization facilities on the applicable interference protection deadline, we will require the broadcaster to obtain a license to cover its existing facility and will only protect that existing facility going forward.²⁶⁷

2. Applications for New Analog TV or DTV Facilities

118. As we stated in the *Second DTV Periodic NPRM*, the Commission has determined it will not authorize new DTV facilities in channels 60-69.²⁶⁸ The Commission has also determined that it will not authorize additional new analog full-service television stations on channels 60-69, and that it would dismiss any application or allotment petition for a new analog facility that was not satisfactorily amended to specify a channel below channel 60 by the established deadline (referred to herein as the "July 15,

²⁶³ In the TV and DTV broadcasting services, applicants file separately for a construction permit and a license to operate a facility when construction is completed. Licensees may also file applications for construction permits to modify their stations' facilities. When applications are granted, the facilities are authorized by a construction permit or license. See, e.g., 47 C.F.R. §§ 73.3533, 73.3536, and 73.3538.

²⁶⁴ Some commenters request that we more narrowly limit interference protection to broadcasters in the 700 MHz band. See APSCO Comments at 2. See also Access Spectrum Comments at 10-11; NYS-OFT Comments at 14-15.

²⁶⁵ Sinclair Comments at 13.

²⁶⁶ In limited circumstances we will grant interference protection beyond the replication/maximization dates for stations granted construction extension waivers. See section IV.B., *supra*. In addition, some stations may elect to take advantage of the opportunity to "carry over" maximized facilities into the core by meeting our replication requirements as discussed in that section.

²⁶⁷ See section IV.D., *supra*.

²⁶⁸ *DTV Sixth Report and Order*, 12 FCC Rcd at 14671, ¶ 182.

2000 filing window").²⁶⁹ Thus, there will be no new analog TV or DTV entrants in the 746-806 MHz band, other than those acquired through auction, which wireless and other new service providers must protect.

119. In the *Lower 700 MHz Band Report and Order*, we dismissed pending petitions for new NTSC channel allotments in the band comprising channels 52-59, stating that adding new analog TV allotments or stations at this stage of the transition would be inconsistent with the DTV transition process.²⁷⁰ With respect to pending applications for construction permits for new analog TV stations in this band, we provided a 45-day opportunity (referred to herein as the "March 8, 2002 filing window") for applicants to request a change in their applications to either (1) provide analog or digital service in the core television spectrum, *i.e.*, channels 2-51, or (2) provide digital service in the 698-740 MHz band, *i.e.*, channels 52-58.²⁷¹ Any applications or rulemaking proposals and later associated applications filed by pending applicants during this 45-day window must be protected by wireless and other entities. Because of the adjacent channel interference that new stations on channel 59 could cause to new licensees in the adjacent Upper 700 MHz band, we concluded that we will no longer accept or grant any application for a new analog TV or DTV station on channel 59 nor permit an existing DTV station to modify its channel to channel 59. We required parties with outstanding applications specifying channel 59 to request another channel within 45 days after release of the *Lower 700 MHz Band Report and Order*.²⁷²

120. In the *Second DTV Periodic NPRM* we indicated that digital service in the Lower 700 MHz band could be proposed after the auction of channels in that band by a station with an existing DTV allotment on a channel outside the 52-58 band seeking to move to a channel inside this band or by a DTV station inside this band seeking to move to another channel inside the band.²⁷³ As we indicated in section IV. A. 2, *supra*, we have determined herein that, in order to facilitate the channel election process, we will no longer accept, as of the date of adoption of this Report and Order, applications for DTV channel changes and swaps. Thus, there will be no new analog or DTV entrants in the 698-740 MHz band other than those acquired through auction.

121. A few requests for DTV channels in the 52-58 band were filed during the July 15, 2000, and March 8, 2002, filing windows. The Commission has completed processing all but one of these petitions for rulemaking. While these parties may continue to pursue construction of their proposed facilities within the 52-58 band, we will permit these parties, upon Commission approval, to elect not to construct these facilities and instead to give up their assigned DTV channel in the 52-58 band in return for a DTV channel inside the core. We will assign these broadcasters an in-core DTV channel when we generate a revised DTV Table of Allotments.

²⁶⁹ *Reallocation Report and Order*, 12 FCC Rcd at 22971, ¶ 40. See *November 1999 Window Filing PN*, 14 FCC Rcd 19559 (1999); *Window Filing PN*, 15 FCC Rcd 4974 (2000).

²⁷⁰ *Lower 700 MHz Band Report and Order*, 17 FCC Rcd at 1042, ¶ 44.

²⁷¹ *Id.*; *March 2002 Window Filing PN*, 17 FCC Rcd 2155 (2002).

²⁷² *Lower 700 MHz Band Report and Order*, 17 FCC Rcd at 1042-43, ¶ 45.

²⁷³ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1300, ¶ 59.

3. Channel 51

122. In the *Second DTV Periodic NPRM*, we sought comment on the interference protection that should be afforded by wireless entities and other new service providers to future analog TV and DTV facilities on channel 51 that are authorized or requested after the auction of the spectrum comprising channel 52.²⁷⁴ Channel 51 will remain allocated to broadcast use as part of the core television spectrum (channels 2-51), and is available for use by existing and new analog TV and DTV stations. However, as we stated in the *Second DTV Periodic NPRM*, because channel 51 is adjacent to channel 52 we are concerned about possible interference between new wireless and other licensees on channel 52 and operations on channel 51. In the *Lower 700 MHz Report and Order*, we declined to adopt a guard band or other specialized mechanism to protect DTV operations on channel 51, and stated that we would instead rely on interference protection criteria to ensure that new licensees adequately protect core channel TV and DTV operations.²⁷⁵ We noted that the adjacent channel protection for TV and DTV stations on channels 52-69 is no different from the protection for those stations in the core spectrum; only the duration of that protection differs.²⁷⁶ In light of our concern about possible adjacent channel interference, we sought comment on whether we should provide the same level of adjacent channel protection to future analog and digital broadcast facilities on channel 51 as is currently provided by wireless or other operators to incumbent analog and digital stations on this channel and, if so, how we can accomplish such protection without unduly restricting use of the channel 52 spectrum.

123. MSTV/NAB urge the Commission to ensure that stations on channel 51 continue to receive at least the same level of protection as other stations on in-core channels, including protection from wireless and other new service providers.²⁷⁷ Flarion Technologies, Inc. ("Flarion") argues that any interference protection the Commission adopts for channel 51 should be reciprocal. Thus, according to Flarion, channel 51 television licensees should be required to protect channel 52 wireless operators from harmful interference and *vice versa*.²⁷⁸ Flarion also argues that applicants for new broadcast facilities on channel 51 should be required to undertake frequency coordination with wireless operators using channel 52 frequencies located within 100 miles of the proposed channel 51 facilities. Such a requirement would provide notice to wireless operators, underscore the obligation of channel 51 broadcasters to protect wireless operators on channel 52 frequencies, and allow both users of the frequencies to take steps to minimize potential interference.²⁷⁹ Flarion also argued that the Commission should reduce or eliminate the required desired/undesired signal strength ratio for "distantly adjacent" wireless channels; *e.g.*, those

²⁷⁴ *Id.* at 1300-01, ¶ 60.

²⁷⁵ *Lower 700 MHz Band Report and Order*, 17 FCC Rcd at ¶ 23.

²⁷⁶ Because DTV stations on channels 52-69 will eventually relocate to the core TV spectrum, the broadcast interference protection standards on channels 52-69 will no longer apply after the transition. By contrast, the need for protection of broadcast operations on core TV channel 51 will continue indefinitely.

²⁷⁷ See MSTV/NAB Comments at 6, n.5.

²⁷⁸ See Flarion Comments at 4.

²⁷⁹ *Id.*

that are at least 4.75 MHz removed from the top of channel 51.²⁸⁰

124. We will accord the same level of adjacent channel protection to both incumbent and future analog and digital broadcast facilities on channel 51. Thus, wireless and other operators on channel 52 must provide the interference protection prescribed in the *Lower 700 MHz Report and Order* to all broadcasters on channel 51, including any that may commence operation after the auction of the adjacent channels in the 52-58 band. We agree with MSTV/NAB that stations on channel 51 should receive the same level of protection as other stations on in-core channels, including protection from wireless and other new service providers.²⁸¹ We disagree with Flarion that any interference protection the Commission adopts for channel 51 should be reciprocal. Channel 51 is part of the core channels reserved for broadcast use, and we do not believe use of channel 51 for broadcast purposes should be restricted in order to protect operations on channel 52, even if those operations predate the commencement of operations on channel 51. We also decline to adopt Flarion's proposal that the Commission reduce or eliminate the required desired/undesired signal strength ratio for "distantly adjacent" wireless channels. This proposal to revisit the wireless to TV and DTV protection criteria established in the 700 MHz proceedings is beyond the scope of this proceeding. The Commission's rules do permit wireless and other operators in the 52-58 band to negotiate agreements with broadcasters and other operators to accept any interference that may be caused by operations on distantly adjacent frequencies.²⁸² Licensees proposing new operations in the 700 MHz bands on a frequency "distantly adjacent" to an existing operation could also file a request for waiver of the interference requirements.

H. Simulcasting

125. In the DTV *Fifth Report and Order*, we adopted rules requiring DTV licensees to simulcast 50 percent of the video programming of their analog channel on their DTV channel by April 1, 2003. This requirement increased to a 75 percent simulcasting requirement on April 1, 2004, and increases to a 100 percent requirement on April 1, 2005.²⁸³ The simulcasting requirement was intended to ensure that consumers enjoy continuity of free over-the-air video programming service when analog spectrum is reclaimed at the end of the transition. The Commission has stated that it may be difficult to terminate analog broadcast service if broadcasters show programs on their analog channels that are not

²⁸⁰ According to Flarion, the current rules treat the entire 6 MHz comprising channel 52 as "adjacent" to channel 51. However, a 1.25 MHz wireless channel used at the top of channel 52 could be as far as 4.75 MHz removed from the top of channel 51 and as much as 9.5 MHz removed from the channel 51 visual carrier. Thus, Flarion argues that such "distantly adjacent" wireless channels should not be subject to the same adjacent channel protection requirements imposed on wireless channels immediately adjacent to channel 51. Instead, the FCC should reduce or eliminate the required desired/undesired signal strength ratio for "distantly adjacent" wireless channels. According to Flarion, this argument applies to all TV channels that are adjacent to wireless services, not just channel 51. At a minimum, Flarion contends that the FCC should recognize that "distantly adjacent" wireless channels are less likely to interfere with channel 51 facilities than wireless channels that are immediately adjacent to channel 51 and should consider this factor in evaluating alternative engineering analyses allowed under Section 27.60 of its rules. See Flarion Comments at 5.

²⁸¹ See MSTV/NAB Comments at 6, n.5.

²⁸² See 47 C.F.R. § 27.60(b)(1)(iv).

²⁸³ *Fifth Report and Order*, 12 FCC Rcd at 12832, ¶ 54; 47 C.F.R. § 73.624(f)(i)-(iii).

available on their digital channels.²⁸⁴

126. In the *Second DTV Periodic NPRM*, the Commission sought comment on whether we should retain, revise, or remove the simulcasting requirement in 47 C.F.R. § 73.624(f), how to define simulcasting, and whether the existing dates for implementation of the simulcasting requirements are appropriate.²⁸⁵ We asked in the *Second DTV Periodic NPRM* whether the ultimate requirement of 100 percent simulcasting other than at the very end of the transition creates a disincentive for broadcasters to innovate. We also asked whether a requirement to simulcast is necessary or whether broadcasters have a market-based incentive to simulcast and are currently simulcasting 100 percent of their analog programming on their digital channel. In addition, we sought comment on whether something less than a 100 percent simulcasting requirement would be sufficient to protect analog viewers while allowing for innovation on the DTV channels.

127. In an *Order* adopted April 28, 2003, the Media Bureau granted noncommercial educational television stations a six-month waiver of the DTV simulcasting requirements, until November 1, 2003.²⁸⁶ The Bureau noted that, in light of the burden faced by NCE stations in complying with both the construction and simulcasting requirements at once, and in light of our pending re-evaluation of our simulcasting requirements, good cause existed to grant NCE stations a six-month waiver of the simulcasting requirements in Section 73.624(f).²⁸⁷ We also stated that we would consider requests for waiver extensions from NCE stations on their individual merits if the Commission had not yet acted on the simulcasting issues raised in the *Second DTV Periodic NPRM* by November 1, 2003. The Media Bureau has granted several additional requests for waiver of the DTV simulcasting requirements to give stations additional time to acquire and install the facilities necessary to meet the simulcasting requirement²⁸⁸ or to permit stations to experiment with innovative uses of the digital channel.²⁸⁹

²⁸⁴ *Fifth Report and Order*, 12 FCC Rcd at 12833, ¶ 56.

²⁸⁵ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1302-1303, ¶¶ 65-67.

²⁸⁶ *See Order*, 18 FCC Rcd 8166 (2003).

²⁸⁷ *Id.* at ¶ 6.

²⁸⁸ *See Orders*, 18 FCC Rcd. 22538 (2003) (granting a waiver of § 73.624(f) to South Texas Public Broadcasting System, Inc. ("STPBS")); DA 03-3663 (rel. Nov. 17, 2003) (granting waivers of the simulcasting requirement to three noncommercial stations in New Mexico); 19 FCC Rcd. 7214 (2004) (granting an additional 6 month waiver to STPBS).

²⁸⁹ *See Simulcast Order*, 18 FCC Rcd at 8169 ¶¶ 8-10 (granting a waiver of the simulcasting requirements to Milwaukee Area Technical College to allow MATC to simulcast the analog programming of its two NCE stations on one of its associated digital stations, and to use the other digital station to air high definition programming full time). *See also Orders*, 18 FCC Rcd. 22531 (2003) (granting a waiver to permit Twin Cities Public Television, Inc. to simulcast the analog programming of both of its two NCE stations on one of its associated digital stations and to use the other digital station to air high definition programming full time); 18 FCC Rcd. 22538 (2003) (granting a waiver of the simulcasting requirements to KTWU-DT where the station was providing a wide sampling of innovative high-definition programming as well as a standard definition channel devoted to children's programming); DA 04-1976 (rel. June 30, 2004) (granting a waiver of the simulcasting requirement to Educational (continued...))

128. The broadcast industry commenters that addressed the simulcasting issue unanimously support elimination or reduction of the current simulcasting obligations.²⁹⁰ These commenters generally argue that the simulcasting requirement is not necessary to ensure viewer access to desirable programming because broadcasters have sufficient incentives to broadcast almost all of their programs on both their analog and digital signals. These commenters also contend that the simulcasting rule was intended to become effective at or near the end of the transition to ensure that viewers are not disenfranchised when analog service ceases. According to these commenters, the Commission should eliminate simulcasting requirements now and revisit whether such requirements are necessary closer to the end of the transition.²⁹¹ Broadcast industry commenters also argue that the development of new and compelling digital programming will play a key role in stimulating consumer interest in DTV and in advancing the transition, and that by mandating that broadcasters ultimately air all of the programming broadcast on their analog channel on their digital channel, the simulcasting rule discourages the development of innovative programming.²⁹²

129. NCTA favors retention of the simulcasting requirements. NCTA argues that removing the simulcasting obligation would permit broadcasters to treat their digital signal as a separate, additional program stream and give them the incentive to maintain that separate service indefinitely, making it more difficult to reclaim the second channel at the end of the transition. NCTA also argues that it will be more difficult for cable systems to carry digital signals in lieu of analog signals as the end of the transition nears if the digital signal differs substantially from the analog.²⁹³ CEA states that it would prefer that stations simulcast 100 percent of their analog programming on their digital channel but argues that, at a minimum, the Commission should retain the minimum digital operating hours currently tied to the simulcasting rule.²⁹⁴

130. We believe that, at this point in the transition, mandating a requirement that the programming aired on the analog channel be simulcast on the digital channel is not necessary to advance transition progress. As MSTV/NAB notes, simulcasting has been the general practice of broadcasters as the transition has progressed. Thus, contrary to the concerns of NCTA, broadcasters are not now treating their digital channel as a separate, unique program stream. We also agree with HDNet, Belo, and Disney/ABC that the availability of high-quality innovative digital content is critical to the advancement of the transition. There is evidence in the record that the simulcasting rule may impede the distribution of high definition programming to broadcasters.²⁹⁵ We are concerned that broadcasters not be impeded in (Continued from previous page)

Broadcasting Corporation to permit it to experiment with innovative uses of its digital channel WNET-DT and to offer additional digital programming to the community).

²⁹⁰ See, e.g., Comments of MSTV/NAB at 14-16; Public Television at 31; Belo at 11; Capitol Broadcasting Company, Inc. ("Capitol") at 12; Hubbard at 7; Sinclair at 14; Disney/ABC at 3-4.

²⁹¹ See, e.g., MSTV/NAB Comments at 14-15.

²⁹² See, e.g., Comments of HDNet at 4 (stating that, as the nation's leading producer of high definition programming, the simulcasting rule will impede its ability to continue to distribute such programming to broadcasters); Disney/ABC at 3-4; Belo at 11; Public Television at 31.

²⁹³ See NCTA Comments at 24.

²⁹⁴ See CEA Comments at 19.

²⁹⁵ See HDNet Comments at 10-12.

developing, obtaining, or airing high definition and other innovative programming that could spur consumer demand for DTV.

131. Accordingly, we will eliminate, for the time being, the requirement that broadcasters air on their digital channel the programming aired on their analog channel.²⁹⁶ We expect broadcasters to use this increased flexibility to provide innovative, value-added programming to consumers; if this expectation proves misplaced, we will take appropriate action. However, as we continue to monitor the progress of the transition in future DTV periodic reviews, we will continue to consider whether re-imposition of a simulcasting requirement is advisable. Our concern is to ensure that, as the end of the transition nears, significant numbers of viewers will not be denied access to desirable programming aired only on analog channels. We believe that eliminating rather than reducing the simulcasting requirement is appropriate at this point in the transition. There is no evidence of the need for any simulcasting requirement at this time. While we recognize that, as NCTA argues, viewers could lose access to programs at the end of the transition if programs available on analog channels are not available on digital channels, we believe we can address this concern if the need arises closer to the end of the transition. Because we are eliminating the simulcasting requirement, we do not address herein the issue of how to define simulcasting in the context of the digital transition.

132. *Minimum hours of operation of digital stations.* In the DTV *Fifth Report and Order*, we required DTV licensees and permittees to transmit at least one DTV signal at any time the licensee or permittee transmits an analog signal.²⁹⁷ In the *First DTV Periodic MO&O*, the Commission revised this requirement to allow stations subject to the May 1, 2002, or May 1, 2003, digital construction deadlines to operate initially at a reduced schedule by providing, at a minimum, a digital signal during prime time hours, consistent with their simulcasting obligations.²⁹⁸ The minimum operating hours for these digital stations effectively increases as the simulcasting obligations are phased in. For example, beginning April 1, 2003, DTV stations that were required to be on the air by May 1, 2002, are required to provide a simulcast digital signal at least 50 percent of the time they transmit an analog signal and, under the requirements of Section 73.624(b)(1), are also required to air a digital video program signal during prime time. Along with the simulcasting requirements, the minimum hours requirements step up to a 75 percent requirement in April 2004, and a 100 percent requirement in April 2005. Stations that were subject to the earlier DTV construction deadlines (May 1, 1999 for top-four network affiliates in the top 10 television markets and November 1, 1999 for all remaining top-four network affiliates in the top 30 television markets) are subject to our original rule requiring that they operate their DTV station at any time that the analog station is operating.²⁹⁹

²⁹⁶ See Appendix B with revised 47 C.F.R. § 73.624.

²⁹⁷ See *Fifth Report and Order*, 12 FCC Rcd at 12820, ¶ 28 and 47 C.F.R. § 73.624(b) as adopted in that Order.

²⁹⁸ *First DTV Periodic MO&O*, 16 FCC Rcd at 20598, ¶ 11 (2001), *recon. denied*, 17 FCC Rcd 15978 (2002), *Third Memorandum Opinion and Order on Reconsideration*, 17 FCC Rcd 18571 (2002). The top-four network affiliates in the top 30 television markets are required to operate their DTV stations whenever their analog stations are operating. The reduced digital operating schedule tied to the simulcasting requirements applies only to commercial stations in the top 30 markets not affiliated with a top-four network, commercial stations in markets below the top 30, and noncommercial stations.

²⁹⁹ *First DTV Periodic MO&O*, 16 FCC Rcd at 20599, ¶ 11. See also 47 C.F.R. § 73.624(b).

133. We proposed in the *Second DTV Periodic NPRM* that, if we eliminate or reduce the simulcasting requirements in Section 73.624(f), we amend Section 73.624(b)(1) of our rules in order to retain the same phased-in minimum DTV operating hours for smaller and smaller-market stations that were tied to the simulcasting requirements.³⁰⁰ A number of commenters argue that the Commission should postpone the date by which smaller-market stations have to expand operating hours.³⁰¹ For example, MSTV/NAB argues that the Commission should maintain the DTV operating hours minimum at 75 percent for smaller and smaller-market broadcasters until the end of the transition, at which time a full-time operating requirement would begin. MSTV/NAB points out that, at 75 percent, a station on the air in analog full time would provide digital service 18 hours a day, leaving only the station's least demanded hours of operation, such as the overnight hours, without DTV service.

134. As we proposed in the *NPRM*, we will retain the same minimum DTV operating hours for smaller and smaller-market stations as were in effect under the simulcasting requirements. Thus, DTV stations subject to the May 1, 2002, or May 1, 2003, construction deadlines will continue to be subject to the requirement, effective April 1, 2004, that they air a digital signal for an amount of time equivalent to 75 percent of the amount of time they provide an analog signal.³⁰² The digital signal must be aired during prime time hours. The minimum digital operation requirement will increase to 100 percent on April 1, 2005 (requiring the airing of a digital signal for an amount of time equivalent to at least 100 percent of the amount of time the station airs an analog signal). We herein amend Section 73.624 of our rules to retain the minimum operating hours requirements while deleting the simulcasting requirements.³⁰³

135. We disagree with Paxson that the minimum operating hours requirement should be delayed pending the Commission's decision in the must-carry proceeding. As we indicated in denying Paxson's earlier request for a one-year waiver of the April 1, 2003 operating hours requirement,³⁰⁴ we do not believe that the increase in the hours of digital programming offered to viewers needs to await finalization of the Commission's separate proceeding regarding mandatory carriage of analog and digital signals during the transition.

136. We also disagree with the other commenters who support a delay in the increase in the minimum operating hours of DTV stations. Increasing the operating hours of digital stations subject to the May 1, 2002, and May 1, 2003, digital construction deadlines will help further the transition by helping to drive DTV set penetration and encouraging content producers and advertisers to invest in

³⁰⁰ In its Order adopted April 28, 2003, the Media Bureau denied a simulcasting waiver request filed by Paxson Communications Corporation, which sought a one-year waiver of § 73.624(f), and in particular the minimum operating hours requirements currently pegged to the § 73.624(f) simulcasting requirements. *See Order*, 18 FCC Rcd 8166 (2003).

³⁰¹ *See* MSTV/NAB Comments at 17-18; Paxson Comments at 43-45 (arguing that the Commission should delay its minimum operating hours requirement until one year following a decision by the Commission in its pending DTV must carry proceeding); Block Comments at 9.

³⁰² Effective April 1, 2003 and until the requirement increased on April 1, 2004, these stations were required to air a digital signal for 50 percent of the time they provided an analog signal.

³⁰³ *See* Appendix B.

³⁰⁴ *See Order*, 18 FCC Rcd 8166 (2003).

DTV. These stations have been on notice since the November 2001 adoption of the phased-in simulcasting requirement in the *First DTV Periodic MO&O* that their DTV operating hours must be stepped-up on April 1, 2004, and April 1, 2005. Postponing the required, gradual increase in the digital operating hours of these stations would be inconsistent with the ultimate goal of this proceeding of moving to an all digital television service.

137. Finally, MSTV/NAB suggests that the Commission permit DTV stations coming on the air later than the April 1, 2003, and April 1, 2004, minimum operating hour deadlines (i.e., stations that have been granted an extension of time to complete construction of their DTV facilities and stations that have not yet been granted a DTV construction permit) to ramp up their hours of operation gradually.³⁰⁵ In the *Second DTV Periodic NPRM*, we stated that stations that have been granted an extension of time to construct beyond the simulcast deadlines must comply with the minimum digital operating requirements in effect at the time the station commences digital operations.³⁰⁶ We continue to believe that this approach is appropriate. We disagree with MSTV/NAB that these stations should be entitled to postpone increasing their digital hours of operation while other similar sized stations are required to provide more digital service.

I. Noncommercial Educational Television Stations

138. Noncommercial television broadcasters were scheduled to complete construction of their digital stations and commence digital service by May 1, 2003. Of the 373 noncommercial television stations, 84 were on the air either on time or ahead of this construction deadline and approximately 214 requested extensions of the deadline. The Commission has granted all of these extension requests. Other NCE stations have construction permits that have not yet expired or have filed construction permit applications with the Commission that have been processed and are awaiting additional information or international coordination, or are mutually exclusive. We invited comment in the *Second DTV Periodic NPRM* on what steps, if any, the Commission should take to assist noncommercial stations in the transition to DTV. In particular, we sought comment on whether the financial hardship standard for grant of an extension of time to construct a digital television station should be applied differently to noncommercial licensees.³⁰⁷

139. Public Television argues that the financial hardship standard for grant of an extension of time to construct a digital television station should be applied more liberally to public television stations to reflect their unique means of funding.³⁰⁸ According to Public Television, 45 percent of public broadcasting revenues come from taxed-based sources including federal and state governments as well as public universities and local authorities. Public Television contends that federal funds have been insufficient and not timely enough to allow some stations to meet the May 1, 2003, construction deadline. Public Television states that, to date, the Federal government has appropriated only 13 percent of the total cost to convert, 40 percent of which was contained in the 2003 fiscal year appropriation that was not enacted until February 2003. In addition, state budget crises have curtailed state funding for a number of

³⁰⁵ See MSTV/NAB Comments at 18 n. 21.

³⁰⁶ *Second DTV Periodic NPRM*, 18 FCC Rcd at 1303 n. 94, ¶ 64.

³⁰⁷ *Id.* at 1301-02 ¶¶ 63-64.

³⁰⁸ See Public Television Comments at 14.

stations.³⁰⁹ WHYY, Inc. also supports the application of a less stringent financial hardship standard for public television licensees.³¹⁰

140. As we have acknowledged before, noncommercial stations face unique financial difficulties in constructing digital facilities.³¹¹ According to Public Television, 24 percent of the public television stations seeking an extension of the May 1, 2003, construction deadline cited funding difficulties as a motivating reason for the extension request.³¹² For those stations facing funding shortfalls we have and will continue to consider the unique funding needs of noncommercial educational broadcasters in assessing a station's request for an extension of time to construct a DTV facility. As the unique circumstances of noncommercial stations are being considered under our current extension criteria, we do not believe it is necessary at this time to revise those criteria for noncommercial stations or to change the way we are applying the current criteria to this group.

141. According to Public Television, NCE stations cite non-financial impediments to construction more frequently than financial impediments as the cause for delay in completing their DTV facilities.³¹³ However, there is no evidence that noncommercial licensees face unique non-financial obstacles to completing construction. Thus, we also do not believe it is necessary at this time to revise our criteria for evaluating non-financial grounds for an extension for noncommercial licensees to assist this group to complete the digital transition. We will continue to monitor the progress of noncommercial educational television stations in their conversion to digital transmissions, however, and will continue to assess whether further steps are needed to assist these stations in accomplishing the conversion.

J. DTV Transmission Standard and PSIP

1. Update of the DTV Transmission Standard

142. In the *DTV Tuner Order*, we revised our rules to specify that the August 7, 2001, version of the ATSC DTV standard A/53B should be used in place of the September 16, 1995, version originally adopted.³¹⁴ We also acknowledged the likelihood that there will be further improvements made to the

³⁰⁹ *Id.* at 9-10.

³¹⁰ See WHYY, Inc. Comments at 2.

³¹¹ See, e.g., *Fifth Report and Order*, 12 FCC Rcd at 12852 ¶ 104.

³¹² See Public Television Comments at 9.

³¹³ According to Public Television, 80 percent of the noncommercial stations filing extension requests cited technical reasons (including lack of tower crews, delays in obtaining the necessary equipment, and interference disputes) for filing their extension requests, and 43 percent cited legal reasons for the request (such as zoning disputes or delays in obtaining necessary permissions from authorities), while only approximately 25 percent citing funding difficulties as a reason for the request. Some of the delays reported by NCEs in obtaining necessary equipment from manufacturers was due to delays in obtaining federal funding for ordering equipment. See Public Television Comments at 9, 11.

³¹⁴ *DTV Tuner Order*, 17 FCC Rcd at 16001, ¶ 50. We revised Section 73.682(d) of the rules to specify ATSC Doc. A/53B (ATSC Digital Television Standard, 7 Aug. 01), except for Section 5.1.2 ("Compression format constraints") of Annex A ("Video Systems Characteristics") and the phrase "see Table 3" in Section 5.1.1 Table 2 and Section 5.1.2 Table 4. *Id.* ¶ 51.